

JUNE 3RD 2022



FREEDOM IN A DIGITAL PANOPTIC SOCIETY

THE SHIFT OF RESPONSIBILITY
IN THE PERCEPTION OF
PATIENT EMPOWERMENT

Master Thesis
Techno-anthropology

Billie Jarvad & Emma Hertel

Aalborg University Copenhagen



Title: Freedom in a digital panoptic society - The shift of responsibility in the perception of patient empowerment

Semester: Master thesis - Techno-Anthropology

Project period: P10 (spring)

Aalborg University Copenhagen
A.C. Meyers Vænge 15
2450 København SV, Denmark

Project Supervisors: Theresa Scavenius

Members:

Billie Jarvad (20175195)

Emma Josephine Grouleff Hertel (20174028)

Keystrokes: 129.598

Pages: 54

Appendices: 4 (71 pages)

Abstract

This thesis will explore how HelloMind influences treatment for the patient in a society where rising individualization and patient empowerment are increasing. Furthermore, the thesis will study the dilemmas of the governance of self-diagnosing through digital tools, and in relation to this, who has the responsibility of diagnosing and taking care of the individual. Our study is based on collected empirical data, including interviews with experts in health applications and therapeutic practices, as well as informants with mental health issues. In order to obtain a multidimensional understanding and perception of the technology and its use, these interviews have been held from various perspectives and possible stakeholders. The study is conducted using Michel Foucault and his understanding of Panopticon on a societal level, which will be used to understand and examine freedom and control. Following Nikolas Rose's critical perspective on the biomedical society and governance of health. In addition, Postphenomenology contributes as theoretical points of view to the discussion, to explore the human interaction and relation with the technology.

Our analysis shows the impact HelloMind and technologies have on the individual's freedom, health management, and society's influence on health norms in 2022. Further, we explored the empowerment concept, which promotes users' control over their health, as well as how technologies affect and shape behavior and understanding of technology on an individual and societal scale. Following on from the analysis, the thesis culminates in a discussion of the dilemmas that may arise in how development of digital tools influence the patients' role in the course of treatment, and which challenges of freedom and control that may occur. Subsequently we will present a conclusion on how the perception of patient empowerment changed the shift in responsibility, and which dilemmas of freedom and responsibility in the digital era, that occurs in a panoptic society.

Table of Content

| | |
|---|-----------|
| Abstract | 2 |
| Table of Content | 3 |
| Introduction | 4 |
| Problem Formulation | 7 |
| Problem Field | 8 |
| Methodological Approach | 10 |
| Our position and entering in the field | 10 |
| Case Representativeness | 11 |
| Zooming In and Out | 12 |
| Informants | 14 |
| Construction of Interviews | 15 |
| Transcription | 17 |
| Ethical considerations | 18 |
| Theoretical position | 19 |
| The Responsibility of Health | 19 |
| The Shepherds and the Sheeps | 20 |
| Our Own Health Is Our Own Responsibility | 21 |
| Surveillance In a “Free” World | 23 |
| The Perception of Health Technologies | 27 |
| Mediating the World | 27 |
| The Relations Between Human, Technology and World | 30 |
| Analysis | 32 |
| Converting Mental Treatments into The Digital | 32 |
| Mediation of Freedom | 39 |
| The Shift of Responsibility | 45 |
| Perception and Achievement of Patient Empowerment | 49 |
| What Did We Discover? | 52 |
| Discussion | 54 |
| Vulnerable In a Digital World | 54 |
| Reformulation of the Brain | 58 |
| Loss of Control In a Digitalized World | 60 |
| Sub Conclusion and Recommendations | 63 |
| Conclusion | 65 |
| Bibliography | 67 |

Introduction

Approximately one-third of Danish adults suffer from a mental illness at some point, and more than 700,000 adults suffer from mental illnesses each year. According to Psykiatrifonden in 2021, there are in every classroom one or two students with mental health issues that require professional help (Psykiatrifonden 2021). One of the challenges is that most of us understand what it means to suffer from heart diseases, cancer, or other types of physical illnesses. Since there are no blood tests or medical exams that can determine whether you suffer from a mental illness, the challenge of detecting it is up to the individual itself. In the latter years more people have started to focus on mental health. Looking for some of the important and meaningful cues that can be predictive and supportive of someone's risk for mental illness, has likewise increasingly become of interest, and using something that is in each of our pockets - smartphones. Rapid technological developments, as well as the subsequent consumer demands, have moved into the health sector, making health technology an increasingly popular topic (Haydon 2021). Simultaneously with, or perhaps prior to this development, health has become the new all-encompassing societal ideal that applies to both physical and mental health. Health promotion does therefore not only exist in the health sector but is also a political and individual focus point.

In continuation of the above, we have asked ourselves, what is freedom, and how do we perceive it in 2022? In a country like Denmark, we have a security net if you are financially challenged, we can travel around the world from our airports, have free education, and healthcare, which provides you with many opportunities, and a freedom to have the choice of being 'your own master'. There are no caste systems that force you to stay on a specific societal layer - you can work towards what you dream of. At the same time, technological tools such as the telephone, computer and internet have also provided us humans with a sense of freedom, since we in 2022 are able to transfer money, call people, take pictures, find results for almost anything, access your driver's license and the yellow health insurance card through your phone, and even work or 'attend' lectures. In many aspects, we are no longer bound to a specific time or space in order to do something, hence we can do it through our phones. Our phones can, nowadays, track how much we walk, you can log the various things you experience, observe, or do throughout a day, where you are, what you search for, which type of content you interact with, and the list goes on. With all of these different tools to log and track your body, the data you are creating by interacting with these tools are being

gathered and treated by the algorithms that are embedded in technological tools. For the technological tools to perform, as we as users expect them to, data needs to be gathered. This means that you have to fill out information yourself, besides your usage being tracked. Tracking means to be following something or to adjust it in relation to another. In this way, the notion of ‘tracking’ used in relation to digital tools is quite precise, since the users are being ‘followed’ when using their devices, and thus is the content and patterns of your device being adjusted in relation to what is being tracked. Personally, we, the creators of this project, have up to many times experienced how we forget that the usage of our devices are being used to let the app perform better, in relation to us specifically. Despite forgetting it at times, we often have the tracking aspect in the back of our minds, and it is especially shown when talking or texting about something, and shortly after it appears as an advertisement on your device.

In this thesis we will focus on the application HelloMind, which we have chosen as a case and example of the aforementioned. With HelloMind, you can do hypnotherapy sessions, which all can be done from your smartphone, seemingly like a therapist in your pocket. It acts as an affordable alternative to a hypnotherapy session and aims to help you get rid of phobias and anxieties. This application will act as a substitute for a therapist and allow you to receive treatment. Additionally, it will show you the number of treatments you have received and the process you are going through. In this case, the patient actively participates in their own treatment, for example by making use of digital tools. The fact that the patient participates in their treatment opens a discussion about how much responsibility we can afford to place on individuals with mental problems. We believe this case can illuminate the dilemmas and questions that occur when the individual must, to a greater extent than before, take part in his or her course of treatment through a health application as the responsible and competent health consumer.

This scope and combination of mental illnesses, health technologies on an individual and societal level and how they are affecting each other has piqued our interest. Therefore, this thesis will explore how HelloMind influences treatment for the patient in a society with rising individualization and patient empowerment. Additionally, we will in this project study the dilemmas of the governance of self-diagnosing through digital tools, and in relation to this, who has the responsibility of diagnosing and taking care of the individual.

Our research is based on collected empirical data, including the participation of experts in health applications and therapeutic practices, as well as informants who are or have been suffering from mental illnesses. These interviews have been held in order to gain insight and knowledge about the case from different perspectives and possible stakeholders, in order to receive a multidimensional perception and understanding of the technology and its place.

Theoretically we have been making use of Michel Foucault and his understanding of Panopticon on a societal level, which will be used to understand and examine freedom and control, meaning how the individuals are being bound and understand the technological tools and who there is gaining freedom and control, besides the power relations that are created, once the tools enter the sphere, in a modern Western society. We will investigate how technological development is empowering individuals in such society, and whether it does so. In conclusion, Nikolas Rose's critical societal perspective will draw the influences and changes at HelloMind up to a societal level. Our focus has been on the patient as a resource, and how the use of healthcare apps contributes to the patient's subjectivity within the biomedical community. This is especially interesting for us, in order to give perspectives on the competent health consumer. Through scrutinizing the users of the app and how they use and immigrate it in their world, we will target to understand how digital tools in a human◊technology◊world relation forms the relation between human and world, as we deem it as important to understand how the two are affecting each other. The problem will be further expanded in the following chapter, Problem Formulation.

Problem Formulation

Therefore, this thesis will focus and be built around the following problem statement:

How has the perception of patient empowerment changed the shift in responsibility? And which discussion occurs of the dilemmas of freedom and responsibility in the digital era, in a panoptic society?

The Danish healthcare system is obliged to aid their citizens with help in relation to health if they need it. Though, when it comes to mental help, the procedures are not the same as getting treated for a broken ankle, and the connection between the patient and the treater becomes increasingly important. Due to the rising entry technological tools have made within health, the citizens are in a greater sense obliged to actively act on their own health. By doing so, the citizens will thus achieve empowerment, through technological and digital health tools. The newly achieved empowerment through health technologies makes up with how the Danish healthcare system has been created and worked for years. With healthcare and self-help apps, it is now more or less the individual's responsibility to take care of themselves, rather than the responsibility of the government and healthcare system. Here we believe there are some interesting perspectives in the shift in responsibility for the user's health, and where the user can get help and funds, along with how the patient perceives and realizes patient empowerment, and what challenges might be encountered. By having access to health apps and the internet for information about symptoms, users can gain control over their own health. In this way, the user has autonomy, but is at the same time left with a responsibility they might not be able to handle. This thesis seeks to provide insight into the consequences of technological tools' entry into the health sector, including how empowerment of the citizens and therefore responsibility of health, is changed. Furthermore, we will look into the perception and thought of freedom in a digital world, that apps like HelloMind is a case thereof.

Problem Field

In this section we want to disclaim and explain how we have chosen to understand and translate specific words from everyday language into this thesis, in order to create an exact understanding of the context and how they are used in these scenarios. Furthermore, we want to create a picture of the field we are researching within, in order to create an overview of the society and digital world we are living in, and from there define different words and terms, in order to visualize and understand the scope that we are researching.

First, we want to elaborate on how we perceive freedom and control. The concept of freedom is broad and can have different connotations, with perceptions of what it means. In this thesis, we mainly talk about psychological freedom; being free from addiction in various forms, illnesses, etc. - to be free of mind. Control is what we understand as the contrast to freedom - psychologically speaking. Control is perceived as something or -body having a sort of power over someone or -thing, and thus affecting their behavior, due to what their mind is (sub)consciously being told.

Offline and online are also two words that will be presented multiple times throughout this thesis, whereas both have a significant role in the Western world in 2022. How we are presenting and understanding offline and online is respectively what is happening physically in the world, i.e., could something happening in the offline world, be a person sitting down on a chair. With the word offline, there must not be digital tools interfering in the direct interaction. Online is when an action is happening through a computer, telephone, etc. The acts are going through technological machines, this could i.e., be to chat through an app, like a picture on Instagram or play Pokémon Go.

We distinct between mental health and physical health. Mental health, according to our understanding, is cognitive and related to psychological well-being - an example of a mental disease that might affect your mental health is depression. Whereas we perceive physical health as something affecting your body. This could i.e., be a sprained ankle, broken rib or appendicitis. Though we do not reject that one might affect the other and vice versa, but we perceive it as two different things that in general are not necessarily coherent.

Public and private will also be two notions that will be mentioned throughout the report. Public is the public sector, where we in Denmark, i.e., can get doctor's appointments, with

more, for free. Whereas if you use the private sector, you have to pay on your own. Also, organizations and companies that offer medical help and treatment, such as HelloMind, do we categorize as private.

Lastly, we have made a distinction between patients and users, whereas we perceive users as anybody who wants to engage with technological and digital tools, while the word patients is reserved for citizens who have enrolled in a course of treatment, with a healthcare professional.

We have chosen to elaborate on the various terms mentioned above, in order to sketch the world, we are living in. According to Klavs Birkholm and Niels Frølich, we are living in a world with technological developments and inventions getting presented often and quickly, namely the third wave of digitization, where automatization and physical labor increasingly are becoming technological and digitized (Birkholm & Frølich 2018). While these technological and digital tools also start to enter social spheres and other sectors and labors that have been constructed in one way, and thus have been like that for many years, it can be difficult to adjust to the technological tools. According to Birkholm and Frølich we pay with our usage of technological tools, and by letting the developers and organizations collect our data, entering a scenario of the Wild Wild West, in relation to lawmaking and protection of the users (Birkholm & Frølich 2018; Kraus 2018). Therefore, we believe that it is important to elaborate on these terms, since they are adding on to the dualism that digital tools create, and the fact that physical and technological are increasingly merging.

Methodological Approach

In the following section we will present an overview of the methodology used in this project. This will include the ways in which we recognized the most suitable methods to gain knowledge and how we handled the conflict. As well, the collection, handling, further processing of empirical data and reflections of the collected data will be discussed, in addition to providing an insight into our working process over the past few months.

Our project is built around qualitative research design. Qualitative design wants to explore and gain insight into and within a phenomenon (Brinkmann & Tanggaard 2015). This will include how we perceive the most appropriate approaches to gaining knowledge, and we will come up with our thoughts and reflections on our approaches to gaining knowledge, as well as how we have approached the field of research. Subsequently, our considerations in connection with our informants and expert interviews will be reflected, furthermore, the collection of data, the handling, the further process of the collected empirical data and reflections of the aforementioned will also be presented. In conclusion, we will comment on our ethical considerations in the project and explain where we as techno-anthropologists are in relation to the research context.

Our position and entering in the field

As researchers we take part in shaping the phenomenon when we enter the world. This is something that we have been aware of during our fieldwork for this thesis. Working with the team at HelloMind has shaped and altered our presumptions in the same way as our past educations have been a part of shaping them. In some of the ideation sessions our previous experience from working with and around the healthcare sector could provide the team with clearance when misunderstandings occurred due to the cultural differences of the team in HelloMind and the healthcare sector. During this thesis we have worked actively with our presumptions in a process of reflection, with the aim to include the newly discovered knowledge and findings to our perspective.

In observing a phenomenon in a field, we as researchers are not only observing the phenomenon but also shaping it (Mortari 2015). Therefore, we must reflect about how we affect the fields we are entering, and how our entering is affecting the findings of our research. When we enter the field as researchers, we are influenced by our presumptions

because what we interpret in the field reflects our pre understandings, and that influences the angle of what we hear and see (Mortari 2015).

When studying the field of developing digital solutions for the healthcare sector, we have actively made use of our previous knowledge to locate relevant actors and utilized our understanding of tacit knowledge in the healthcare sector. Even though both of us have experience from previously doing projects within the healthcare sector, we understand parts of the culture, know some of the language, and how to act in relation to informants, but we are not insiders. Therefore, when performing interviews and talking to the informants, we are still able to keep an outside look and ask in-depth questions without taking for granted that we understand the premise of the answer. We have used these differences and our awareness of them actively, thereby being able to reflect individually and collectively regarding our position in the field.

We have chosen to start with an inductive methodological approach, where we are approaching our collected data with an *emic approach*. By approaching the collected data with *emic*, you are as a scientist perceiving the phenomenon from its own culture and its surroundings, meaning that we have attempted to perceive the technology from the perspectives of our various informants. By having an inductive approach, you choose to observe and examine single and individual coincidences and from there conclude something general, and thus make a generalization, as if the case applies to all (Aarhus University n.d.). Thereby we have chosen an *inductive* point of view in an *emic* context, due to us attempting to be able to analyze our findings by summarizing and concluding on our findings, and deliberately choosing the important elements in our collected data.

The interviews we conducted with various informants have formed the basis for our statements concerning technological tools and freedom in a digital era, and from where our inductive approach has been taken. Our informants have been chosen based on their different positions in relation to the technology and the scope we are examining.

Case Representativeness

Bent Flyvbjerg's ideas regarding case studies have been influential on our methodological considerations for this project. According to Flyvbjerg, it is impossible to predict society and people using predictive theories and universal concepts. This is why situated, and

context-bound knowledge is valuable (Flyvbjerg 2010). With this in mind, we chose to position ourselves with the health app HelloMind. Using our situated perspective, we investigate how digital tools have changed the shift in responsibility, as well as the dilemmas that emerge, and we use these findings to express ourselves about the digital society we live in. Based on our expert interviews and documents, we expected that more prominent discourses would be found in the quotes, which was a prerequisite for the further empirical study. In this way, we have consciously chosen to make an information-oriented selection in connection with our empirical data in relation to the use of specific quotations in the analysis (Flyvbjerg 2010).

Because health apps are so different from each other, both in their content, organization and target audience, it cannot be said that the selected case, HelloMind, is representative for everyone. Even so, there are aspects of the empirical evidence that are interesting and useful for generalization to other uses of health apps. As described by Flyvbjerg, representativeness is not necessarily a quality criterion when selecting cases (Flyvbjerg 2010). For the same reason, unique and extreme cases can also be telling about a given problem, since they illuminate the problem differently than the average case might (Flyvbjerg 2010). Researchers may be able to identify specific causes and effects of the non-representative cases and over time, this can provide great insight into the field (Flyvbjerg 2010). While the case chosen for this thesis is not clearly representative, it does provide insight into the experiences patients with mental health issues have when using digital tools based on their treatment and options. This knowledge allows a clear understanding of the specific circumstances that emerge, and thus contributes valuable insights into our problem formulation.

Zooming In and Out

During our report we will make use and employ the methods of zooming in and out, presented by Davide Nicolini in the text *“Zooming In and Out: Studying Practices by Switching Theoretical Lenses and Trailing Connections”* (2009). We will create an overview of the technology and its impacts on a societal and individual level. This method will grant us knowledge about the technology and how it fits into the modern Western world in 2022, why we will be able to identify the most pressing matters, in the eyes of our empirical data. In this way, we will be able to *zoom in* and *out* of specific facets of the phenomena and which is

making it possible for us to find various angles in our empirical, which we can emphasize on, in our analysis and discussion.

Nicolini notes on, when doing observations, applying the methods of zooming in and out in the text *“Zooming In and Out: Studying Practices by Switching Theoretical Lenses and Trailing Connections”* (2009). According to Nicolini, one has to zoom in and ‘out’ of a phenomenon, in order to be able to understand, analyze and work with it. When zooming in, it is done through deliberately selecting an assortment of apparatuses and perceptions, whereas neither of them has the same standpoint or angles on the matter. Choosing diverse perceptions on the examined case, will make the different sides of it appear to the one researching the case, which will create a deeper and improved understanding of what is examined, than if the researcher were to stay at one level of perception (Nicolini 2009). According to Nicolini, a good entry point of applying the method of zooming in on a practice, is to examine the discursive and material activities of the same. When examining the discursive and material activities, the examiner will be attentive to the processes that are described and ongoing in the examined, besides of their short-term goals. Nevertheless, Nicolini likewise points out that studying the discursive and material activities of the practice, is a minor fragment of the research, and one also has to look further after and try to identify facets as relationships, between the actor and activities besides of their affect and impact on the processes (Nicolini 2009).

As mentioned earlier in this section, the term zooming out is also a part of this method that Nicolini presents. Zooming out is characterized by the researcher going out and rising above the particular single practice and examines it between other practices and their relations (Nicolini 2009). When applying the methods of zooming in and out on the practices, it is important and a necessity for the researcher to be able to choose different approaches to the examined, and without having to prioritize one approach above another (Nicolini 2009).

In our optic, applying the methods of zooming in and out when researching and examining a phenomenon, benefits with being able to tell the practices surrounding the technological tools and self-help apps. Firstly, by zooming in, we are enlarging which outside factors there are,

when looking closely at the phenomena, affecting its practices. This could i.e., be how different users of both self-help apps and offline, traditional therapy sessions narrate and perceive these technological tools, such as HelloMind. We would thus research the discourse and goal of the self-help apps, how both users and non-users perceive and discuss it, how they are affected by it and the people who also surround the users. Moreover, it will be possible for us to look into the goals behind digital tools like self-help apps; why is it important, in which ways can it help, what is the story behind it, which use does it have. Afterwards we can zoom out, and look at this technological tool on a societal level and compare what both the experts, namely the psychotherapist, and the sufferers from mental illnesses states about their perceptions of the tools, how the self-help apps like HelloMind are being used today in contrast to physical therapy consultations, and last but not least, how technological tools and self-help apps' practices clashes with the construction of our increasingly technological society that is the Western world in 2022.

Informants

It was important for us to gain knowledge about the company, HelloMind, and their motives for creating the application. To get such information, we held an initiate meeting with the project manager of the company, where we got to know each other, know the company and also to get information and align how we could work together, in order for the project to become meaningful and interesting for both parties. When we first had our initial meeting, we did not have a specific point of view or direction on how we wanted to approach the project. We were in a position where we could see too many interesting aspects of the technology, which made it difficult for us to delineate and find a specific approach, hence we felt like we could keep on going. The informant from HelloMind has from the beginning been very supportive and helpful for us. The informant has a great amount of knowledge within the health tech fields, the company, health care sector, besides personal experiences. We realized that we needed informants with different relations to the public and private sector, besides of being on opposite sides of the treatment. We thus wanted informants that could provide us with information and experiences from both being treated by i.e Psychologists in the public sector and psychotherapists, etc., in the private sector, besides treaters within both.

| Expert interviews: | User interviews: |
|---------------------------|---------------------------------------|
| HelloMind | Informant M with mental health issues |
| Psychotherapist | Informant J with mental health issues |

Table 1: Table with an overview of the projects selected informants.

By having informants covering the various areas, we would then be able to compare their experiences and the data collected through the interviews, to see where the dilemmas occur, when third parties are engaging with the citizens' health. By having such informants, it has been possible for us to examine how, and which place the application made by HelloMind can take in our digital society - and whether it is needed or not. By interviewing people who have experienced and acted within one or both of the sectors, we will gain a better understanding of their experiences and why they have acted as they have, besides their preferences and thoughts regarding the digital tools, the assumed freedom it brings and where the responsibility of health lies with the new possibilities they bring.

As written earlier, we are aware that this is a big field which is hard to illuminate properly, but that is also why we believe that we, as techno-anthropologists, can provide a reliable estimate on the scope, since we have been trained to work with an interdisciplinary point of view, where trying to get an understanding of different actors from different sectors has been the core. Additionally, we believe that our reflections of our methods and the fact that we are aware and have chosen to work from an inductive approach, makes us further qualified for taking on a task within health tech, and the focus on empowerment and sensitive matters, hence we have worked within such fields previously and our level of reflections towards how we act and approach a scope, is an essential part of our study programme.

Construction of Interviews

In this project, empirical data is collected by conducting semi structured interviews. The interviews were held both through Microsoft Teams-meetings and physical meetings. The use of expert interviews, as these help to create a deeper and, in some cases, a more credible view into the desired field. We have chosen to use the method of interviews to obtain knowledge that does not appear in i.e., official reports and government documents. Therefore, we got access to informants who both have been patients and treaters, why they have a more in-depth

knowledge of usage of digitization in health, due to their own usage and interaction with patients and treaters. Both types of informants contribute with a knowledge of how healthcare professionals and patients have used and experienced treatment courses where patient empowerment was involved. It provides deeper insights into the world of digitization and HelloMind as a patient empowerment tool.

As a result of an unstable internet connection, the sound during the interviews was sometimes indistinct, making interruptions from the interviewer and informant more apparent due to disruptions, besides making it more difficult to afterwards transcribe. As a result of collecting the interviews through Microsoft Teams, another challenge was the sometimes inability to read the informant's facial expressions in the actual moment, and the inability for them to read ours - this became apparent after a few instances where we were talking at the same time. As a result of the aforementioned, both the informant and interviewers sometimes found it difficult to know when to let the other part talk, and whether the other part did it, because of the unstable internet and sound connections that were challenging to use. The process of conducting online interviews through Microsoft Teams was, despite the above mentioned, relatively straightforward. Our physical interviews had on the other hand none of these problems. Presence and direct contact made a substantial difference in the quality of the reports we created with the informants.

In terms of collecting empirical data, we conducted two expert interviews and two interviews with informants with mental health issues. Before we conducted the interviews, we had contact with the informants and gained a mutual understanding and expectation of what knowledge they had to share, and what we in the project wanted to learn more about. We decided that one group member should handle the communication and interview with each of the informants, due to the sensitive nature of the subject. We neither wanted to appear too pushy, nor overwhelming for the informant, so we chose to let the group member who had a previous relationship with the informant do the interviews. This was chosen because we wanted the informant to feel that they were able to open up and feel safe.

We designed three different interview guides, one for each type of our interviews. The various interview guides were designed for the purpose of whether it was an expert interview or with an interview with a user that was conducted. Before the interviews were held, we had set up some themes and overall questions, which became the starting point when we had to

design the specific interview questions. Our interview guides were made on the basis of us being aware of the informants being experts in their respective fields. Having an interview guide for a semi-structured interview helped us to stay focused on the topics and questions we had and wanted to unfold, during the interviews. But the semi-structured interviews additionally made it possible for us to follow some of the dilemmas associated with the use of health apps that we were not otherwise aware of existed. In an interview guide, the questions can be modified, and the interviewer thus has the opportunity to interact with the informant, which leads to a positive relationship, which motivates the informant to share his or her experiences and knowledge (Brinkmann & Tanggaard 2015). A series of themes with questions was developed for keeping an overview and creating a common thread throughout the interviews. These questions allowed us to ask clarifying or in-depth questions to our informants, and a guideline for the interview.

Further, each interview guide started with formalities, in the form of approval of the recording of the interview, and presentation of the project, after which we asked the informants to present themselves and their background as it creates transparency to the collected empirical data. Before the interview, informants were informed of the research purpose and provided with a copy of the agenda. Our informants were informed about the possibility of anonymity at the beginning of the interview, we asked for permission to audio-record the interviews, and they were given the opportunity to receive the transcript afterwards.

Transcription

We conducted our interviews both in person and through Microsoft Teams. In both situations the interviews were recorded on our phones, so we would be able to transcribe them afterwards which would make it possible for us to quote our informants directly. Accurate transcriptions are essential for the project in order to reproduce the correct statements made by the informants. For this accurate and correct transcription, we used the program O'Transcribe. This program allowed us to slow down and pause the audio recording when transcribing.

Before starting the transcription, we decided to exclude onomatopoeia unless it played a significant role in the text. We also included notes from side conversations with our

informants, as this gave us an additional insight and understanding of their perspective, and in the same manner, we could 'follow the actor' (Marcus 1995).

As all of our informants were native Danish-speaking, our interviews were also held in Danish. Since the interviews were held in all of the attendants' native language, it created a more relaxed atmosphere during the interviews, which made it possible for both parties to express themselves freely, without having to think about translating their views into a second language. As a result of this, we will be translating our used quotes as accurately as possible from Danish to English through the report, so that the meaning and perspective of the quotes are not lost in translation. Despite this, our appendices for the interviews will be in Danish.

Ethical considerations

Before conducting our interviews with informants, we had some thoughts about the ethical aspects of our project. Our thoughts were primarily in relation to our informants' anonymity, statements, and confidentiality towards us, especially because of the sensitivity of the subject. We made an executive decision to anonymize all of our informants, among others because of the sensitivity, the subject, and their professions. We were not asked to sign a duty of confidentiality in relation to HelloMind, or to anonymize our informants, but since mental health and the practice of treatment around can feel like a taboo to many, we chose to do so. It was important for us to show our informants gratitude and interest, so that our informants could have a safe relationship with us, and that we could thus get their unedited thoughts, honest and in-depth answers during the interviews. Because of mental health problems being a sensitive and private topic to talk about, both patients and experts were interviewed in Danish, since that was the informants' favoritism. According to our users, they felt vulnerable and insecure regarding their mental health and mostly it has been a difficult topic to open up about. Due to the sensitivity of the topic, the informants felt that if the interview was conducted in English, their vulnerability would increase, since English is not their native language. Our experiences have taught us that there often is a certain degree of safety for our informants, when conducting the interviews in the informants first language, if possible, hence switching over to another language can feel more intimidating. The Danish language allowed the informants to express themselves more clearly, which meant we also could ask more specific questions and get detailed answers.

Theoretical position

To understand which role patient empowerment and freedom has in relation to the entry of technological tools and the placement of responsibility due to the same, and the following dilemmas that may occur, we will engage with three different theoretical approaches. First off, we will be using the concepts from Nikolas Rose's book "*The Politics of Life Itself*" (2001), to recognize and understand, describe, and reflect critically upon the patients and user's role in empowerment, responsibility and freedom of the users and patients, in a digital era. Furthermore, Rose's characterization of the 'biomedical' society, where Denmark will be used as a paradigmatic example of where dilemmas may occur and the creation of empowerment and shift in responsibility of health (Flyvbjerg 2010). Following Rose's notion of *biopolitics* and *-medical* society, we will use Michel Foucault's book "*Discipline & Punish – The Birth of the Prison*" (1978), with a focus on his concepts and understanding of the Panopticon. Panopticon will be used to recognize the fields of freedom and control, thus which type of empowerment that the rapidly developing technological society that we live in, in the 21st century, creates for the individuals. Lastly, we will employ the concepts of Postphenomenology, where we mainly will be using concepts presented in "*Technology and the Lifeworld: From Garden to Earth. Bloomington and Indianapolis*" by Don Ihde (1990), to frame and examine the relationship between human, technology, and world, and thus the users' relation to the HelloMind app, to understand their view of the world and how it is affected by technology. Postphenomenology will also help us to understand the digital tools and the mediation of their solutions in a technology-human relation. Additionally, it will aid us in the framing and connection of all the above, in order to set the setting for how technology is intruding and the relationship between it and the humans and their world. Postphenomenology will not be applied or used as a part of our analysis, though it will act as a focal point in our discussion, to address HelloMind and technological tools' act in human's freedom in the Western society.

The Responsibility of Health

In this project we include the British sociologist Nikolas Rose and his critical views on society and biopolitics. The critical view is used to describe the structures and society in which the use of the HelloMind application arose, as well as to critically reflect on the application's introduction and use in relation to the individual's freedom. Rose applies a range

of analytical concepts and perspectives to the power structures that are critical towards the structures that exist in modern Western society. In addition, we use his characteristics of the *biomedical* society, where he states that the individual is guided to follow society's norms of health, to explore which dilemmas that occur when using health apps.

Things as we in the modern Western society would claim was natural or a matter of course, such as the idea of rational, free, and delimited subjects, things that are obvious in our current society, is according to Rose an illusion and a thought of line that he questions. Rose is interested and examines the correlation between psychology and government, which allows us to study patient empowerment in today's society. According to Rose, we as individuals who are taking part in a society, are governed, and regulated on multiple parameters, despite the thought and illusion of being free and rational human beings (Rose 2001). This conception will be unfolded in the subsequent section and in the analysis.

The Shepherds and the Sheeps

Rose describes the society that we live in today, as a *biomedical* society. Rose pins this thought on how the modern human being has developed a new and increasing will to optimize their health, both psychologically and physically speaking. We see this in the use of health apps and will explore this further through the use of the app, HelloMind. This contemporary governance and power are not organized or administered by the 'state' - although we use this term to surround the whole complex of legal provisions, state-funded research organizations and national commissions of inquiry into the medical and ethical aspects of the new biomedicine. Power, on the other hand, takes place in a controversial field of ethics committees, professional associations, results from researchers, criteria from employers and insurance companies, tests developed and promoted by psychologists and biotech companies, advice offered by self-help organizations and critical perspectives from religious organizations and sociologists. This network of power-creating organizations and actors emerges as shepherds who guide and guide citizens as their sheep, through technologies for the transmission of information and communication (Rose 2001). These governing technologies blur the boundaries of coercion and consent, through discursive techniques that teach new ways of reproducing aspects of oneself to thought and language, new ways of making oneself and one's actions receptive to judgment and:

“[...] they reshape the telos of these encounters in specific ways, for example in terms of psychological notions of mental health, or in terms of the recent, but currently ubiquitous idea of ‘quality of life’ – each now defined within, and measured by, any number of rating scales.” (Rose 2001, 10)

Within the network, which consists of human and non-human actors, Rose shares a point on his perception of the health aspirations which lie in the network, and the behavioral patterns of the concerned individuals, are ‘governed at a distance’ by them shaping how they understand and execute their freedom (Rose 2001). Thus, it is interesting to examine how this understanding of freedom is interpreted by both patients and clinicians in their way of perceiving the app HelloMind, and how HelloMind can benefit the creation of competent health consumers. Rose argues that people are governed through their freedom indirectly based on the use of technologies. Because of that, it can be discussed which “freedom” the individual has in a neoliberal society, since technology is:

“[...] any assembly structured by a practical rationality governed by a more or less conscious goal [...] hybrid assemblages of knowledges, instruments, persons, systems of judgment, buildings and spaces, underpinned at the programmatic level by certain presuppositions and assumptions about human beings.” (Rose 2007, 29)

As mentioned in the above quote, technology includes the physical and social tools that guide individuals and their social practices. In this way, Rose argues, technology becomes a management tool with an ideology that can create power. With the HelloMind app, each user becomes an active partner in managing their own health, and they, themselves, have co-responsibility for their own health. Understood in the way, that you had to see a doctor or therapist for help with your mental health issues, but now you have the opportunity to take more control of your mental health process by receiving therapy at home and online. In addition to the users' own responsibility, the company also plays an active role in ensuring health, and it is interesting to investigate HelloMind's role in this context.

Our Own Health Is Our Own Responsibility

The above mentioned development in the Danish society, where technology and private companies are entering the healthcare scene, is what Rose calls ‘advanced liberal’. The concept is built upon the individual now being *governed at a distance*, by various technologies that control the individual by the usage of them. The user does as a result from

this development, realize themselves from choices that are being controlled by technologies (Rose 2001). Since the ideal in our society, according to Rose, is the idea of a responsible, self-governing, and self-optimizing citizen, diagnosis and treatment will therefore be designed and driven accordingly. The diagnostic practice thus also contributes to overdiagnosis. According to Rose, control of the individual and his behavior takes place through subjectivation in the social way of thinking about health promotion. The biological citizen must have control over himself and constantly pay attention and monitor, modulate and control thoughts, feelings, and behaviors regarding the variation of life and the requirements for the development of medicine. The goal here is to improve yourself, maximize your potential and find your true self, as HelloMind claims to do. The individual is subjectivized to govern himself, allegedly based on his own interests, by the pharmaceutical industry and an official focus on optimizing health (Rose 2010). Rose's point of view is that *"human beings in contemporary Western culture are increasingly coming to understand themselves in somatic terms - corporeality has become one of the most important sites for ethical judgments and techniques"* (Rose 2001, 21). Following this development, the individual is now forced to see themselves as a somewhat biological being, where they need and shall be able to detect and describe physical and mental symptoms and deviations from the normal.

When using HelloMind, you must be aware of what or which categories you have difficulties with and what you would like to work on. The application therefore becomes a practice for the development, where the individuals must take care and be aware of the responsibility for their own health, *"Every citizen must now become an active partner in the drive for health, accepting their responsibility for securing their own well-being"* (Rose 2001, 6). The initial shift in the responsibility of health, where it used to be in the public sector, but now is more and more on the individual's shoulders, is also shifting the awareness and responsibility in other places. The fact that the users and patients now have to be more aware of both themselves, but likewise others in their social sphere, is increasing the awareness and questions regarding morality and health related decisions and is in bigger terms depending on the single human being, rather than the government and healthcare sector. Health is not exclusively a political or medical, public governmental responsibility, but rather an individualistic one, where you must take active parts in the decisions and actions, in order to keep up with society. An example of the aforementioned is HelloMind.

With the previously mentioned perspectives that Rose has on biopolitics, we can examine the impact HelloMind potentially can have on the single user, their health, and overall ability to act in a deeply technological and individualistic driven society as the modern Western world. We will in continuation research which relationships and shifts HelloMind can entail on a societal level and how consumers can become and navigate competently in a sphere where they act more as individuals and the responsibility is increasingly their own. We can furthermore delineate the shaping of those consumers, both by technologies and the surrounding society.

Rose's view on *biopolitics* contributes to a more political and social debate about how different movements and opinions in society influence individual decisions, even though it is our duty to live the "good life". This perspective allows us to describe how humans are shaped - not only by technology, but the entire society around technology. Rose is used in this project to shed light on ingrained power relations and understand the society in which we live in today. We use Rose to investigate which impact HelloMind may have on people's perceptions of health, and the effects HelloMind might have on a societal level.

Surveillance In a “Free” World

To conceptualize and fathom how technology is affecting our *biomedical* society, the empowerment, individualization, and lack of same it brings with, besides the ontology and perception of our current society, we will apply concepts by Michel Foucault from his book “*Discipline & Punish – The Birth of the Prison*” (1978), where we will focus on his interpretation of, ‘panopticon’ (Foucault 1978). To understand the concept of *panopticon*, used by Foucault, and its relation to our project, we argue that it is important to emphasize our approach to the same, which we will elaborate in the following.

In this project we have chosen to add on to Rose’s understanding of a *biomedical* society. With Rose we described the current society that we in the Western world live in, and now we with the concept of ‘panopticism’, by Foucault (1978), aim to describe, examine, and understand how the society has been shaped by, among others, health technologies and technological solutions. To understand the concept of *panopticon*, one has to know the story behind it and from where it has its origin. We want to disclaim that we are taking on a ‘panoptic’ approach, which is a bend we have made, from the notion Panopticon, by Michel

Foucault (1978). By bending the concept of the Panopticon prison and making it an ism, we are using the *panoptic* approach and *panopticism*, to understand the world that we are engaging in and examining, while employing the notion as an understanding for the world. From here we can examine HelloMind and its position in terms of *panopticism*, and how it is engaging in our current society. The *panoptic* approach can also be utilized in many different scenarios to examine a phenomena's role in the society, such as social media, the internet, Rejsekortet, etc.

Looking back to Panopticon, and in order to understand *panopticism* as a concept and ism, we want to present the story behind. *Panopticism* is built upon the prison system known as Panopticon, first devised by Jeremy Bentham, an English philosopher and social theorist, back in the 1700s (Brown University, n.d.). The Panopticon was by Bentham, thought of as a streamlined prison system, that should make it possible for the guard to monitor as many prisoners at the same time as possible. The *panoptic* design would then result in less guards and overall security costs (Brown University, n.d.). The Panopticon prison by Bentham was designed and described by Foucault, as follows:

“[...] at the periphery, an annular building; at the centre, a tower; this tower is pierced with wide windows that open onto the inner side of the ring; the peripheric building is divided into cells, each of which extends the whole width of the building; they have two windows, one on the inside, corresponding to the windows of the tower; the other, on the outside, allows the light to cross the cell from one end to the other. All that is needed, then, is to place a supervisor in a central tower and to shut up in each cell a madman, a patient, a condemned man, a worker or a schoolboy. By the effect of backlighting, one can observe from the tower, standing out precisely against the light, the small captive shadows in the cells of the periphery.” (Foucault, 1978, 200).

The prison was thus designed to have one actor who was able to follow and surveil all the other actors in the cells, while they were not able to see the supervising actor. This means that the prisoners at all times knew that their every move potentially could be observed, but they would never know if it was so. The prisoners in the Panopticon prison are thereby aware of

them being surveilled at all times, though they never know if they are being supervised, leaning them into acting accordingly, as if they were surveilled at all times (Foucault 1978).

The at potential all time present supervisor is what Foucault especially adheres to in relation to the prison system Panopticon and is also what he aims to expand from an effected few in the prison system to the matter of a whole society. Foucault argues that Panopticon is not only a prison but can be translated into the 'free' social world, where "*Visibility is a trap.*" (Foucault 1978, 200). Looking at today's modern society with the technological solutions and possibilities we have developed, we as humans in the society are prone to be much more visible to the outer world than when there were not the same technological tools. Additionally, we have promoted our possibilities and options to go beyond our local sphere - both offline and online, which means that you will not have to be physically present, to experience or observe something or -body. Taking the Foucauldian glasses on, and observing our current society, where smartphones, the internet, social media, street cameras, tracing and tracking of offline and online whereabouts are ubiquitous and being logged, we would argue that we, despite of a feeling of being emancipated and having opportunities to go wherever you want to - online and offline - live in a *panoptic* society, where the feeling of freedom is a belief we have due to our rising opportunities, globalization, etc., but the playbook of freedom has changed. Thus, it is in 2022, difficult to be invisible. *Panopticon* makes sure that it is not possible for the observed to become invisible and you are at all times prone to be supervised and observed. To Foucault the constant risk of being supervised, means that there is a hierarchy in the power relations. Somebody or -thing holds the power above somebody else, due to the behavioral norms that are being set in the sphere, which determines if you are eligible to take part in the social sphere, or if you should be sanctioned (Foucault 1978). Here we can perspective the somebody or -thing to laws or social norms that make sure that we act in a certain way, in order to 'upright' a civil society or maximizing our yield as human beings, where if we do not follow those, we would get sanctioned.

According to Foucault, the constant threat of being overlooked and surveilled, has a controlling force to the object being observed, making them act accordingly to the rules or norm being set, "[...] *he inscribes in himself the power relation in which he simultaneously plays both roles; he becomes the principle of his own subjection.*" (Foucault 1978, 203).

While the subject becomes more aware of the visibility of himself and the acting according to that, the power does not need to be physically present, as i.e., a prison guard, but tends to become more non-corporal and more constant in its effects and presence (Foucault 1978). This non-corporal institution that is holding a power force over the subject, can be thought of as the common social media platforms that many in the modern society are making use of, such as Instagram, Twitter, Facebook, or Snapchat. On these platforms there both exist a set of rules set by the platform and lawmakers on how to engage and behave, and if those are being violated, you will be excluded from the aforesaid society. Furthermore, there are also social rules of how to act and engage, rules set by the users, where you will also risk being excluded, if you are violating those.

Other non-corporal institutions could also be your telephone or other tracking apps, such as running apps, health apps, etc., where you are being tracked, compared, and can share your results with others who also have the same app. The ubiquitous and constant measuring there exists in various applications and on social platforms, creates a possibility for always being watched, and at the same time not knowing who is watching you or when, creating a scenario of *panopticism*. The possible ubiquitous surveillance of each other, creates a norm set of how to behave and an urge to match those engaging with each other in the app, hence you do not know when or who you are being ‘watched’ by. The online social aspect of these apps can also create a spillover effect to the physical world, in terms of people getting drawn to your persona or the opposite, recognizing you on the streets, etc., hence creating a spillover *panoptic* setting, where it is ubiquitous in both the online and offline world and the two worlds are affecting each other. In scenarios like the just mentioned, Foucault would argue that Panopticon is no longer ‘just’ ruling and acting as a physical prison system, to those who have been sanctioned and put in the specific prison, but is acting as a ubiquitous entity ruling over all of us, present in the society - and where it is not *a* specific person or entity controlling others as the prison guard does in his job, but us all engaging as a prison guard and power force to each other.

None of these exclusions or authorities of power offline are actual or directly physical, nor will their consequences to violations be, but they will still affect the human, their world, and their perception of it - presumably affecting their mental health. So, while the human has

become more empowered and less bound to physicality, time and space, due to technology, *panopticism* and social norms among us, has become more present, due to the rising presence of technology and the ability to reach each other at all times.

Panopticism leads us to the perception and the role that Postphenomenology will play in this project. We will use Postphenomenology as a perceptive tool and access to our scope and the examined subject, to zoom in and investigate the relations that are created due to and with the biomedical and -politic society. We will examine these relations that occur in the *panoptic* and biomedical society, in order to understand how it is engaging in and with the world, besides contributing to the creation of the society we live in.

The Perception of Health Technologies

To understand the role of patient empowerment in the creation of the competent health consumer, we find it is essential to examine how citizens with mental health issues perceive digital tools like HelloMind. To do so, we will elaborate on which terms we find the most important from Postphenomenology, for us to be able to look into the overall relation to the technology, and how it affects their world and how they experience it. Phenomenology's focal point lies on how phenomena emerge to the actor, why the human cognition is the baseline. Phenomenology is known for its positioning against technology; meaning that the subject sees technology as an entity that alienates humans from the world. Technology thus acts as an entity, separating humans and the world they are engaging in and with, in the eyes of the subject (Heidegger 2010). Postphenomenology, on the other hand, does in contradiction to this notion, by incorporating technology's relation to the world. Thus, technology will, in a Postphenomenological setting, consequently not be something that should be seen as an alienating part between the human, as it would in phenomenology. Technology would hence in Postphenomenology, become and seen as a constituting force of reality, in relation to the human and world. We argue that it is crucial to recognize the patient's and the overall users' relation to technology, which in our case of this project, is the HelloMind app, to understand their view of the world.

Mediating the World

Technology-relations are assisting in determining how humans are recognizing the world. They should be comprehended as devices that will trial human beings, at the same time as creators of insights to the human along with the relationship. As written earlier, the technological development and increasing role in many everyday lives emphasizes the technology's role as a medium and their influence on the perception of the world. In relation to the creation of competent health consumers and the presumably rising freedom there is related to technological development, technology might take a bigger role in how we as acting individuals in a society are perceiving each other through technologies. This is building on top of the *panoptic* concept, made by Foucault, in a setting with biopolitics and responsibility by Rose.

Since we are engaging in the perception of digital tools, we desire to analyze the technology-human relation that we presented in our collected empirical data. We will examine the technologies and their mediation of perception to understand the digital tools and how their solutions are mediated in a technology-human relation. This mediation and perception are being shaped in the relation, by both the app developers, the users and by the technology, as we will show in the analysis. Don Ihde has created four forms of analytical relations which aims to describe the various ways on how humans, technology, and the world are engaging with each other and related. The relations are called as the following: 'embodiment relations', 'hermeneutic relations', 'alterity relations', and 'background relations' (Ihde 1990). In this thesis we have chosen to focus on the *hermeneutic relation*, hence we find it to be the most suitable for our scope. The relation will be used as an instrument to understand how HelloMind is perceived and thereby how we, in a rapid technology developing society, can find the dilemmas in these technological improvements and following liberties. The relation will be elaborated further down, in the section 'The Relations Between Human, Technology and the World'.

To understand how technology is affecting the human being and its world, once they are being used, we will elaborate on the notion of 'mediation approach'. This is done to understand how, i.e., the app HelloMind, can and affects the users, their world, and vice

versa. According to Peter-Paul Verbeek, one of the principal notions in Postphenomenology, is the *mediation approach*. The *mediation approach* is based on the thought of technologies and humans being perceived as two entities that shape each other. Humans and technologies are thus in relation to each other, and not perceived as separate entities, interacting with each other (Verbeek 2011). In the Postphenomenological world, technology does not mediate by itself. The mediation is formed in the liaison with the human. Once technological artifacts are being used, they affect how users act and understand their world, who they are engaging in. Thus does the ongoing mediation between the human-technology relation shape and convert the perception of the world and reality of the human (Verbeek 2011). An example can be smartphones, where we have easy access to almost everybody who also has a smartphone. Due to the smartphone, the individuals engaging with a smartphone do not necessarily have a need for meeting the other person, in person; because they can be reached through the phone. In that way our behavioral patterns have been changed, compared to before the smartphone was invented, where you in a higher degree were forced to meet offline, to interact. Alike, is the perception of the world through and with technological artifacts increasingly relevant to notice and observe. Thus, it becomes increasingly interesting to examine the perception in relation to HelloMind and the health-tech evolution proportional to the creation of a competent health consumer and their rising acclaimed freedom, with an understanding of the *mediation approach*.

Technological artifacts are being used, interacted with, read, incorporated and by that, the relationships to technologies are affecting the human and how they perceive and experience the world, besides how they are engaging with and in it. Technology thus acts as a medium, from where the human is perceiving its world. When humans are interacting with technologies, their relationship to and with their world of life is immediately shaped differently. Technology therefore takes a role as a helper in promoting the human's understanding of themselves and furthermore how they interact with the world that is surrounding them. An example of how technological artifacts can influence and promote the human's understanding and acting in their world, can be a chair. For many years, there has been a common understanding and deception of how different positions and ways of sitting on a chair radiates i.e., femininity, masculinity, health, strength, weakness, shyness,

confidence etc. Meaning the way of positioning yourself on a chair, whether it was your subconscious or not, promoted your inner feeling and how you wanted to present yourself, in that exact setting. Many apps for smartphones share the same elements as the chair. Apps, both directly and indirectly social, have a social element from which you can interact with others on the application or share elements to non-users. The social element is contributing to emphasizing how technology is helping to shape the users' perception of themselves and their surroundings and also how they are interacting both online and offline and want to present and mediate themselves through the technology - in many different respects. Due to the above, it is of importance for us in this project, to comprehend and examine "[...] *the roles that technology plays in relations with man and the world.*" (Rosenberger & Verbeek 2015, 31). To understand which role technology plays in the creation of competent health consumers, with access to unimaginable amounts of knowledge and treatments, which entails a sense of freedom.

The Relations Between Human, Technology and World

Going back to the aforementioned relations, we want to elaborate on those, to get an understanding of the relations that are entailed when humans and technology interact. Which relations that are created in the interaction and how they are shown. With Postphenomenology, we can zoom in, on our scope and look into the details in and of the interaction, where we will receive and examine the relations that are created in the interaction, and how technology is being mediated through the user and their world is affected (Nicolini 2009). Postphenomenology will provide us with a wider and more specified understanding of our scope, from which it will then be possible for us to understand how the perception of technology, in a typically physical sphere, is being perceived and engaged with. Additionally, how technology is contributing to more freedom of the individual, in relation to health, and whether that is the case, when taking the Postphenomenological approach and putting it on top Foucault's notion of Panopticon in a social structure, in Rose's perception of a *biomedical-* and *political* society.

When engaging in a *hermeneutic relation* the app takes the role of shaping the world, and thus be presented to the human as the world. Meaning that the human thus will interpret the

world through the technology, in this case app, and read the world through it, and thereby not separating the technology and the world. The *hermeneutic relation* aims to interpret and understand through the aforementioned. The *hermeneutic relation* is explained as being an interpretation through technological mediated representations of the world. The human does not position itself in a direct sensory relationship to the experienced world, opposing the *embodied technology relation*. Thereby the human is often separated in both time and space from what is experienced (Ihde 1990). Instead, will the experience thus take place through representations that are obliged to be interpreted. Additionally, does Ihde also present *otherness*. *Otherness* is a sort of relationship that conveys an experience where technology becomes the object of what is experienced and is thus experienced as a *humanized other*. The relationship of *otherness* is fundamentally diverse from the *hermeneutic* and *embodied technology relationship*, since the technology is a part of the experienced world, and not a mediator of it (Ihde 1990).

Analysis

Continuing from our theoretical approach from the previous section, we will move on to the analysis. Through the combination of our two main theoretical approaches, Michel Foucault's perception of Panopticon in a societal setting, and the critical views on society and 'biopolitics' by Nikolas Rose, we will examine the understanding of technological artifacts and their effect on human behavior in the modern Western society. We want to discover the impact that technological tools and the streamlining it brings to one's everyday lives, and thus how it is affecting the society as a whole, and the specific individual. In this chapter, we will use Nikolas Rose's critical perspective on society and *biopolitics* to discuss and analyze how a digital tool, like the hypnotherapeutic app HelloMind, can be introduced into modern Western society in the most positive and effective way. We will also analyze how HelloMind and technologies alike are affecting the individual's freedom, the management of their health, and the surrounding society's role in the shaping of norms of health. Also, we will focus on the part of empowerment that aims to give patients and users greater freedom of action by increasing their control over their own health. By taking on the point of view of Foucault and his understanding of Jeremy Bentham's Panopticon-prison, we will take on Panopticon as *panopticism* and apply it as a social theory on our current Western society, why we are trying to understand how technologies are forming and affecting the users and individuals in the society's behavior and understanding of technology, on both an individual and societal level. With a Foucauldian perspective, it will be possible for us to create an understanding of how the individual's freedom is being experienced, and whether technological development is to be perceived as freedom. We see HelloMind as an example of the current society we live in, where technological tools have an increasingly defining role to our structures, interaction, and behavior.

Converting Mental Treatments into The Digital

This project concerns technological tools and mechanisms, and what they bring us in our everyday lives. We focus on the problem of the alleged freedom that these tools provide us with and how they act in the shaping of the Western society and the individual. We will in this section dig into three different points which will be the focus of the analysis. The first focal point will be to analyze the meaning and importance that social togetherness holds, and how important it is for the human being, as we are social creatures. Second, we will dive into

the relationship there is between human beings and how it is affecting us to interact with each other. Third and last, we will examine how digital tools interfere with this. To understand this interaction, we will analyze our empirical data and make use of Rose's notions and understanding of a *biomedical* society, where humans aim to enhance their physical health at all times. We will also analyze the understanding of freedom and technological tools together, with a *panoptic* point of view, which takes its stance in *panopticism* as we have applied it as a social theory, since we argue that technological tools in the current Western world, creates structures and changes to our behavior from how it was, prior developed technological tools. This is to understand how technological mechanisms are contributing to our social structure and how humans act within those structures.

"P: Yes, and then there is another thing, and that is, but I presume that you will cover that later, but it is this with sitting opposite of another human being, it has an enormous effect.

B: How?

P: Because we are social creatures and our nervous systems simply work together, and we will preferably develop ourselves together with others." (Appendix 1, p. 2)

As the above quote by expert informant P, a psychotherapist, emphasizes, human interaction is fundamental in the development of oneself. Human interaction is what has brought and developed us to where we are now, in 2022. Many claim that the reason why the human species, who are physically weaker than i.e., a lion, has survived for so many years besides becoming a superior species, is because we have learned to collaborate with each other (Wolpert 2013). Collaboration and interaction between humans have thus been a significant part of the development of human beings. As our informant P points out, our nervous systems work together, meaning that when we are physically interacting, we are somewhat developing ourselves unintentionally. This is among other things, why the physical aspect of being a human and interacting with each other, is so important.

As mentioned in our theory section, technological artifacts, such as the telephone or computers and the following internet, has changed a lot for our way of interacting and behaving, both towards ourselves and others. We would, from our own experiences, assume that we, in this generation, are in a stronger belief that there no longer is the same need for physically meeting others, since we can do it on the internet or through text messages and phone calls. It has furthermore become easy to cancel social interactions if you feel like you are not the slightest up for it, since you can do it in advance and are not obliged to meet up physically, in order to cancel, making all appointments with others - and yourself - unsure until both parties arrive at the venue. With the different technological artifacts, resources, and opportunities we now have at our hand, it is easier to neglect ‘the harder things’, such as meeting others, working out, etc., and simply stay at home and cocoon around yourself.

“If it is, that it is anxiety and phobias, then it can be a really good thing to be exposed by having to go somewhere. At the same time, one can say that with anxiety-phobias, then it can also be good to be at home, because it is safer. On the contrary, it is good to develop this, that you have to go from somewhere to another, so you also will expand your safety zone. [...] But it can also do that you stand in stomps (if you do not go out). So, like completely low practicality, the thing with it is, where it is, right.” (Appendix 1, p. 1)

As the above quote by informant P emphasizes, there is a need for a person suffering from anxiety and phobias, to get out of their comfort zones, due to them being able to expand their safety zones. When expanding the safety and comfort zones, the concerned person will most likely start to feel safe in other places than at home. But to create new safety zones, is not just to go out and then you immediately will feel safe somewhere new. It takes practice and time, and knowing what you can expect, and if you do not have specific places to go, it can be difficult to go out there and create them – especially if you are alone.

If the person suffering does not have anywhere to go with a purpose, how will they create new safe spaces? With an app like HelloMind, you will most likely use the application at home, in a safe environment, where there is quiet and ease, since it is what it requires, to function correctly. You will then not be forced to leave outside of your house, and you will

not be required to push your boundaries and create new safe spaces, because you can do it from home. When doing it from home, you will most likely not create new safe spaces, nor will you develop yourself in the same manner as you would have done if you were with somebody else. Since the technological tool, in this case HelloMind, is focused on one person, which is the one using it, it is at the same time also a somewhat isolating technological artifact, that requires that you are alone when using it, and do not need nobody around you.

Since therapy and treatments often is at the treater's clinic, it has been a norm that it was in a physical setting, where the patient has been needed to create and develop a safety zone and think of the treater as a confidante and the room as a confident room. Since the consultations have been set as being in a physical room, the client needed to go from one place to another, forcing them to interact with other human beings, and thereby developing their nervous systems. With a therapist or a confidante, you as a client have someone to lean up against and to guide you, help you to see the small steps you are making and the progress that you are showing, which is, according to our informant M, a young individual who has been dealing with various mental illnesses for years, creating a feeling of not being alone and that you have someone to guide you:

"[...] it does so you will not feel like you are alone in it, that you have somebody who kind of takes and holds your hand. Also, because necessarily you do not know what necessarily happens, in order for you to get better. Sometimes you just start to see that you are getting better. So, it is also kind of out of the blue sometimes." (Appendix 2, p. 2).

What we want to emphasize, from the above quote, is the insecurity of when and how you are getting better. What informant M is explaining, is how important it is to have someone to lean up against, when you are not feeling mentally well. The importance of having a confidante and having a person that can look objectively at you and the steps you are taking and telling you how things take time. The insecurity that you have when you are not mentally well, can, according to our informants, seem overwhelming at times and it can feel like you are not making any progress: *"But I think that it is quite nice that with, that you can feel, when you*

are feeling really, really bad, that you are not really getting any better... and I think that if you were alone, then you would not... I think that you would give up quicker [...]" (Appendix 2, p. 2). But having someone to talk to and who can calm you down, keep your will to get better, etc. is important - especially if you are in a place where you find it hard to dig yourself out from the hole that you mentally are in.

The experiences and thoughts shared by informant M resonate with informant P, the psychotherapist's, statements about the development made with other people and offline interaction. When starting a treatment process with a therapist, you are thus entering and making a commitment to another person, about taking action and meeting up at certain times. This commitment is a responsibility that you have towards yourself, but also towards another person, in order to get better. By making this sort of commitment with another person, you are both leaving your safety zone at home, and developing new ones. You are interacting with another person and thereby developing your nervous systems, whilst socializing. The three aforementioned factors are some of the main differences in HelloMind, technological artifacts, and physical treatment sessions. Technological solutions allow you to individualize and withdraw from the rest around you, because you suddenly have opportunities online or on your device, that streamlines your everyday life and gives you shortcuts in various aspects. We can now do grocery shopping online and getting it delivered to your doorstep, so you will not have to do it physically yourself, you can call somebody and chat with them so you do not have to catch up offline, you can dictate words to your computer or telephone and the told words will appear on the screen, as if you had typed them in yourself. The aforementioned is just a few examples of how and what technology has become, and how they are streamlining our everyday life.

Since technology has taken on such a part in our everyday lives, one can ask the question about why it should not also be able to help you to feel mentally better – and why should it not be able to do it at home? With the various technological solutions, it is possible and easy for a user to stay at home and become more isolated, since the technological solutions have been extended to the level they are. But since physical human interaction is so important for

the development of our nervous systems, one can wonder about how these technological solutions affect our society, both on an individual and societal level, and in which relations?

One of these possible effects that we want to dig deeper into is where and with whom the responsibility lies, and to where it will be moved, when technological tools like HelloMind, moves into the mental health sphere. HelloMind is a technological tool that for the time being is standing alone and is not a part of an official treatment process with professionals. Furthermore, HelloMind is an application that requires that you are in quiet surroundings, preferably alone. As mentioned earlier, mental health treatments often require that you are at a clinic, with the treater, and that you interact. With an app like HelloMind, you are left alone, you are not obliged to talk with anyone about your thoughts or experiences, the process that you are making nor whether you are getting or feeling better. You are also not obliged to talk to or tell anyone about your feelings, problems or what you are going through, or that you have entered this course of treatment. This means that you are alone with your motives and experiences about a mental health treatment, and thus you carry all of the responsibility of your treatment. As our informant M states, when you are in a bad place, it can be more difficult for you to keep on fighting, and easier to give up or push it away:

“[...] I think that you would give up quicker, where if you told it to the person that you go to: I do not feel like anything is happening, I am getting worse, getting stressed from nothing happening. Then there is somebody who can help you and say, “it takes time”, and there is somebody to support you and guide you. Where I think that exactly that point, you will not get that out of it, if you did it yourself through an app.” (Appendix 2, p. 2).

The fact that technological solutions like HelloMind, are giving you the opportunity to avoid involvement of and with others, can be questioned in terms of who and where the responsibility belongs? As informant M in the above quote is emphasizing on, the importance of having someone to lean up against and to guide you, when you do not feel any progress, informant P is at the same time also expressing the weight in interaction with other human beings, in order to develop yourself (Appendix 1; Appendix 2). When engaging with

technological tools instead of other people or professionals, the user is applying pressure on themselves, giving themselves the power and role for the responsibility of healing.

“My parents were to go on vacation one time, and I was so nervous about that, and there, I was really feeling bad, and then she (red. Body SDS treater) was like: if it is so, then you can just come home to me and be with me the whole weekend. I mean, that is crazy with a person that you per se do not know privately [...]” (Appendix 2, p. 5)

When looking into the experience informant M, who has been battling with mental illnesses, shares, it is most likely that they would not feel this confidence or safety about their parents traveling if they did not have their treater to give them a safe space and let them know that they (red. the treater) would be there for them if they needed it. An app would not be able to provide that level of safety or confidence that the treater could, which helps to take away the responsibility of the ‘suffering’s’ person's shoulders, and instead share it with them.

If the room or ‘zone’ of help to mental stability and health, comes to being dominantly online the responsibility will shift from being a shared responsibility between patient and treater, to lying on the patient’s shoulders solely. *“So, it is also up to you that you, yourself, have a responsibility. But that responsibility is of course way bigger towards another person, once you have said that you would like to commit, rather than towards a phone.”* (Appendix 1, p. 3). As informant P narrates, it is even when a patient has a treater, there is still a big part of the responsibility for the treatment, lying on the patient’s shoulders, even though they have committed themselves to something, where they have done it to and with another person, whom they are gaining a personal relationship with, meaning that they are working with them towards something. Following this line of thought from informant P, the patient’s responsibility and commitment towards a telephone does somehow not weigh the same, as towards another person, and the persistence and development behind the treatment will then be more likely to fail, since you do not have a person that you owe to meet up and be committed towards.

The patient has also isolated themselves from possible connections and nervous system developments, which, when we look at the Western society from a Rose-perspective, is seemingly fit for a *biomedical* society. As Rose sees it, we do live in a *biomedical* society, where freedom and rationality are seen as a naturalness, he believes it to be an illusion. If we draw a line from Rose's perspective of our 'free world', we will look into the fact that technological solutions and applications, usually are presented and thought of as tools that can give you more freedom in your everyday life, since they bring streamlining and makes up with 'physical' limitation in terms of having to be a specific place in order to achieve or do something, i.e., a clinic (Rose 2001). Though, one can also argue that the 'freedom' that apps like HelloMind is bringing, can become compulsory and controlling for the user, making them control how they, to some extent, live their life:

"[...] our brain thinks it is really lovely if it finds out that I now have completed these 10 sessions. So, there is something in us, that would say "Yes now it is on a roll", and then there will be something else where you feel that it might not be like that anyway. So, there will be a conflict there, I could imagine." (Appendix 1, p. 10).

As the above quote says, our brain likes the feeling of completing tasks, and for it to be visually presented to us, why we believe that the freedom, presented by the application, can in a Rose-perspective, be deemed as an example of the illusion that is created in a *biomedical* society, of freedom, since we still would be underlying a form of government set by another instance (Rose 2001).

Mediation of Freedom

As mentioned earlier in this project, when making use of or even having a technological tool by your side, the chance of getting tracked, to collect data, is very big. The ubiquitous tracking can be compared and transferred onto the perspective that Foucault shares about Panopticon and its construction, and how it can be transferred onto a society. Foucault builds further on the Panopticon-prison construction and argues that it can be understood as and added on top of the society, in terms of how we are living (Foucault 1978). It is from there

that we bend the notion into taking on a *panoptic* approach and *panopticism*, in order to understand the world and surroundings of what we are examining.

As written previously, technological tools are made to track the user, in order to perform as expected. Meaning that when you interact with your device, you are being tracked and feeding it with data, so it can perform accordingly. You are thus never fully aware of, or conscious about, whether or not the app or device is tracking your usage and activity, and to what extent, though you know that it is more or less omnipresent and that you might be tracked. Both where you physically are with your telephone, besides of how you are using it and your patterns. In a *panoptic* prison system, as an inmate, you will never know when you are being watched, which creates an incentive to act according to the rules, in order not to get sanctioned - because you will never know when you are being watched. In the same way, when being a citizen in the Western world in 2022, technological tools are a big part of the society and new initiatives are being taken, developed, and implemented in rapid tempi, to streamline the processes, for all stakeholders. The digital tools are in many ways working together across the tools, i.e., does Nem-ID work with banks, healthcare apps, etc., banks work with e-commerce platforms and applications to let people shop online. With dating apps, among others, you often have to turn your geographical location on, to see where you are in relation to other users, likewise when you use Google, they also ask for permission to see where you are located, to provide you with more exact results. The various examples of apps and platforms working together in different ways, emphasizes the omnipresent surveillance that is happening, and that, as Foucault claims "*Visibility is a trap.*" (Foucault 1978, 200), and the question thus arises, whether we can be free of surveillance in 2022?

The fact that we live in a society where you are prone to be documented and logged in your every move, due to the technological developments that have been made and shaped our society, we believe that the notion 'free' has to be understood in another way, than how it previously has been. Living in a society that is *panoptic*, it is according to Foucault never possible to become invisible, you will always be prone to be scrutinized and others will have access to your data and to information about you (Foucault 1978). When looking at the Western world in 2022 and understanding it as a *panoptic* society, there are thus created a

hierarchy, that the users might not be aware of, due to their understanding of being free is more bound to a physical freedom, rather than an online one, why it can be perceived as if the technological tools have brought freedom. Though, taking on the perspective of Foucault and *panopticism*, we raise the question about whether technological tools have brought freedom, or if it is the exact opposite? “[...] I think that the way we have created our society, that it is necessary to be attentive to how we are feeling. Because we do not get physically worn out as we did back in the days. It is simply our heads.” (Appendix 1, p. 10). As the above quote by psychotherapist, informant P, explains; the way our society has been built, we are not getting physically ill or injured the same way as we did 60 years ago, due to the limited amount of physical labor there is, caused by the technological development, where machines have been made to lighten the physical labor. As informant P states, it is the brain and head that now are being worn out, creating pressure from the inside. Implied in the quote is also that our society has changed, from more physically focused to, now more mental – or less physical. Before we got worn out physically, now it is mentally. This correlates with how an understanding of freedom and being free, was bound to the physical aspect of limitless movement and being able to move around, whereas now we argue that there is more of a focus on being mentally free. Mentally free is more subjective to determine in which parameters the freedom counts, for some it might be from addiction to their telephone, others work, stress, anxiety, etc. The correlation between the physical freedom that technology brings you, creates a paradox in the ubiquitous and scrutinizing patterns that technology has. In this perspective, we ask whether freedom is not any longer solely a question of physicality, but also mentality?

“Then it probably would be the addiction of checking all the time, I do not think that any overuse of anything is good for something. And especially for persons with bad mental health, then I definitely do not think that all apps will contribute with anything good. [...] And then the treatment will suddenly become a misuse in itself.” (Appendix 4, p. 2)

In the above quote by informant J, who is dealing with mental issues and gets treated in the public psychiatry, J narrates how ‘checking’ can become addictive. J mentions themselves, how checking their daily step count has become a part of a mild addiction and is something that they want to achieve daily and makes them change, i.e., their walking route, to obtain the

goal of 10.000 steps a day. “*Calories, if we are thinking calorie-app, then there are many disadvantages about it, because you can become totally obsessed, it can become a competition, right. I think that can be a bit dangerous, [...].*” (Appendix 2, p. 9). As informant M also recalls, apps to count calories have an addictive side to it: “[...] *then they will become crazy addicted to it, and then it starts to be something like when they go out and are grocery shopping, they will do it out from the app.*” (Appendix 2, p. 9). Both informants who are getting treated for mental illnesses recall how they, and others, can act out from something that is logged, told or mediated through their phones, and how they will rearrange their intended routine, in order for it to fill in the checkmarks from their technological device. As informant J narrates, they are actually not sure why they are reworking their day, in order to fulfill the goal of taking 10.000 steps, but it is something they have been told, and it is through their technological device that they can detect whether they have fulfilled the goal or not, “*I am checking it multiple times daily, to see if I have accomplished my 10.000 steps. I actually do not know whether you have to walk as much, but there are some smart people who have said it.*” (Appendix 4, p. 2).

Reading the statements of the informants, with the eyes of Foucault and Rose’s understanding, we argue that there are some in power, that is above the user themselves, regulating and acting as a guiding force for the users of technological devices. In the *biomedical* society, Rose argues that free and delimited subjects are an illusion and that there is a powering force, governing and regulating the human being. The individuals in a *biomedical* society have a new desire to optimize and enhance themselves physically and psychologically, which is why and where i.e., apps like HelloMind, occur (Rose 2001).

With a Rose-perspective, in the *biomedical* society we live in, the above-mentioned apps are taking on the force and power of the shepherds, where they are guiding the users to do certain things in a certain way, to receive information and data, to perform even better. This guidance is happening in a blurry way, where the user might themselves believe that they are taking control over their body, but in the end, it is the shepherds and technological tools that are telling them how and what to do. Since we now live in a more mental driven society, where machines are doing most of the physical labor, and where we mainly work with the machines

and sit at desks. We are having technological devices at our hands at almost all times, why it is imaginable that we are becoming more driven towards the guidance of applications, while also being both more critical because we have a bigger awareness towards health, while at the same time also being easier to persuade and guided, when it is concerning health and optimization of it, because our technological devices are at the same time also our main source of knowledge. Thus, the distinction between gaining knowledge, control and freedom or being a sheep guided by a shepherd is becoming more and more blurred,

“[...] our brain really thinks it is lovely if it finds out that now I have accomplished these 10. So, there is something in us, that would say “Yes now it rolls”, and then there will be something else where you feel that it might not really anyway. So, there will be a conflict there [...].” (Appendix 1, p. 10).

As the quote by psychotherapist, informant P, above narrates, it is difficult for the brain to distinguish the many impressions given and at the same time to feel after what your body is telling you and how you feel, because you have been told something different from another narrator. This situation shows how there is a shepherd trying to act as a governing force for the user, whilst guiding them in how they are feeling and what they should do. As Informant P tells, a conflict can occur with the user, since they are being guided towards a feeling, or in a subconscious way, being told how to feel, which they might believe in, whilst maybe having a feeling of it not being completely like that. The fact that they are being shepherded, can imaginably create a feeling of reliability on the shepherd, in this case technological tools, why the users will leave their confidence in the tools and their words, letting themselves be guided.

“[...] I do not think that any overuse is good for anything. And especially for persons with bad mental health, [...].” (Appendix 4, p. 2), as informant J claims, people with bad mental health are not as strong mentally as people who are not suffering from it. It is therefore presumably that people with bad mental health are more at risk of becoming addicted or letting the technological tools they rely on become a power over them and letting them control their lives and actions, rather than guiding them. The users have been told, through

the tool, that this is the way they can optimize themselves, and therefore live, succeed and achieve the norms set in a *biomedical* society, where performance, and therefore mentality, is a sign of success. As Rose argues, in a *biomedical* society, we as human beings are forced to see ourselves as biological and therefore *somatic*, meaning that we have got to come to an understanding of ourselves and detect and describe different symptoms and deviations from the normal (Rose 2001). But how has technologies like health apps that are guiding or controlling your actions and understanding of yourself, affected this requirement to feel and detect yourself in a *biomedical* society, when being a *somatic* and biological being?

As we in this project are arguing that we, in the Western world, are living in a *biomedical* society, we want to build on top of this understanding by adding on with Foucault's *panopticism*; stating that the *biomedical* society, described by Rose, creates a springboard for the entering of *panopticism*, to understand the shaping of the society. The understanding of *panopticism* comes, as earlier written, from Panopticon, the prison system, which according to Foucault, can be added on to a societal level (Foucault 1978). As many health apps and technological tools are presenting themselves and getting introduced as tools and a way to live more freely, because you are not obliged to be at a specific location at a specific time. Since they are digital tools and thereby saving your data, in a *panoptic* and Foucauldian point of view, they would not necessarily be deemed as free or freedom-creating. The technological tools are, as previously written, set up to work with each other across different platforms, which is why they are ubiquitous in their tracking and presence.

In a *panoptic* setting, there are, as in the *biomedical* society, created power relations. The supervisor is supervising and observing a person, in which power relations are thus being created, due to the supervisor being obliged to act in a specific matter, in order not to get sanctioned (Foucault 1978). When inspecting our scope, we will see how a power relation again is created between the user and the technological tool, with the latter being in the position of power, due to it setting the rules on how to behave, to get rewarded, “[...] *we do need applause! There is that with sharing and getting likes and so on. It is the same as getting applause. And that means... that they are a bit hollow...*” (Appendix 1, p. 12). As informant P is narrating, it is important for us as human beings to receive applauses and praises, and since

we have moved into living a more individualistic and technological way, we are receiving and giving applause online, but they are not necessarily meant with the full that they would have been in real life, making them hollower than they otherwise would have been. This hollowness is still though addicting, why users would keep on searching and acting accordingly to get them. This is the same search and feeling that you can get through health apps, when you follow their guidance, because you then will oblige, act accordingly and not deviate from what their norm is set to be, and in this way receive applause. In a *panoptic* perspective, if you use the app, you will be guided to follow it and therefore also tracked, thus overviewed. You will be guided to use the act as they recommend, making it the supervisor and the one who holds the power, since they have the role of being able to sanction you, mentally, if you do not follow the guidance.

In a *panoptic* point of view, the authority over the human being has thus become even more present, and is not just acting socially offline, but likewise online, and from a technological tool towards the human being. Again, we can ask the question about whether our freedom is bound up with each other, emotional connections, and physical limitations, or if it has moved more towards your own individual mentality and what you are projecting to yourself?

The Shift of Responsibility

Based on our empirical work, we will in this chapter of the analysis study how the user is the decider of their own health, and therefore if their responsibility for their mental health increases. In recent years, the freedom of the individual has become a discussed topic, mainly because technology has developed so rapidly in its capabilities. This freedom gives the user an opportunity to gain control over their own health by being able to track and monitor their health, through health apps and using the internet to gain knowledge about symptoms. This provides the user with autonomy, but at the same time also leaves the user with a responsibility they might not be capable of taking care of or have. Concurrently with the rising freedom for the individual and the rapid technological development, healthcare applications for smartphones have for the past few years been made with increasing interest and rapid development. With healthcare and self-help apps, the responsibility for the user and for taking care of themselves, has changed from being more or less solely within the public sector and the healthcare system, to for the user themselves and private companies. Here we think that there lie some interesting perspectives in the shift between the responsibility for the

user's health and where they can go to get help, the funds they need, and how the patient perceives and achieves patient empowerment, and which challenges there might occur in relation to this.

We describe patient empowerment as a relationship between a patient and professional that is equal, where the parties can work together to achieve a common goal, and where both are responsible for the outcome. This creates a shared responsibility of the course of treatment, where a great emphasis is placed on the individual as a responsible citizen, whereby the citizen who suffers from poor mental health is made responsible for his or her own illness and health. Now we will look further into our empirical data and study what responsibility means for the informants, and if they are capable of taking responsibility in their course of treatment, when they are suffering from bad mental health.

“I sat for an example one day and googled a bit of symptoms and it completely led me astray, where I knew that it had taken over and that I just had to wait until I had time with the psychologist. I thought I could diagnose myself and get wiser on my thoughts, but I just got even more confused.” (Appendix 4, p. 1)

The quote highlights the Informant J, who suffers from mental illnesses' active involvement through, among other things, being able to monitor their symptoms. This statement seeks a responsibility of the individual, who must take responsibility for being aware of symptoms and dealing with everyday life. The above quote is an example of the knowledge that is available for all citizens with access to the internet, and how they thereby are expected to be able to gain and understand the available knowledge, and thus be able to navigate in it. But the use of the internet in connection with one's own health can lead to despair if the understanding is lacking. The user must understand themselves in somatic terms and is expected to be able to monitor themselves and in such a way be able to distinguish what concerns them and what does not, besides when it is urgent (Rose 2009). When the user has access to knowledge, they will be expected to be able to take responsibility for their own illness and health, since they have the ability to determine whether something is out of the normal. But should patients with mental health issues be left with such a responsibility? In addition, the informant expresses in the quote that by taking the responsibility of seeking the knowledge themselves did not lead to any usable knowledge, and that the patient was not capable of monitoring the symptoms and diagnosing himself. As described in the theory

section, Rose emphasizes that the individual in today's *biomedical* society is subjectivized to be a biological citizen who is responsible for managing his or her own illness and health (Rose 2009). The consequence of this, is that the biological citizen has not only responsibility for, but also a duty to choose and deselect. This ultimately means that the individual themselves is responsible for choices and actions that can lead to mental health, which we also can see in the quote below, by informant M, who has been suffering from mental diseases for years:

“Especially also in the society in which we also live, nowadays, where there is an enormous amount of pressure, from many different fronts. You just have to be so young, and successful, and so beautiful, and so funny, and be social, and one and the other. In other words, one's mental health is also just put under enormous pressure.” (Appendix 2, p. 4).

As the informant emphasizes in the quote, there exists an enormous pressure in today's society, where the individual is responsible for their own life and for making the right choices so that they can compete with others. Therefore, the individual is placed in a position where he or she can, through active action, realize their own potential and develop towards a truer self, where the individual must continuously flex and optimize themselves in an attempt to live up to the internalized demands and norms of society (Rose 2009). The informant also describes the many different offers of treatment that can be chosen: *“But psychotherapy is something I have received from someone else, and Body SDS is also something I myself have found privately, and the same with clairvoyant”* (Appendix 2, p. 2). Therefore, the individual with poor mental health is seen as responsible for choosing between and accepting the offers that exist so that they can learn to master mental difficulties.

There are several available treatments, including the app HelloMind, which we will examine in the following section. By letting patients take control of treatment, HelloMind aims to subjectify them, transforming them into responsible, self-optimizing, self-managing citizens. Based on existing norms and ideals, the individual is encouraged to become a subject and at the same time to pursue the ideals for their own benefit. From this, accountability in society can be seen as both a premise, as well as a means and an end in itself. To achieve health and happiness, society presumes individuals have the potential to be responsible. Therefore, becoming a responsible citizen is a desirable goal in and of itself (Rose 2001). This perspective is also supported by the expert informant from HelloMind, in the quote below:

“That people feel that it was easy and that “I actually did it myself”. Because we feel it is easy, and because you have, in fact, done it yourself. You have that too, you have just used a tool for it, have you not?? But in reality, all the work lies with the person who starts the session and chooses to do something about this problem.” (Appendix 3, p. 11).

As our informant from HelloMind describes, the treatment process must be easy and easily accessible to the user. The informant also places great emphasis on the benefit of being able to take the treatment on their own. By using the digital tool, the patient can easily manage the diagnosis and treatment themselves, but without the care from others. However, this requires that the patient is self-reliant and has the necessary knowledge. Thus, HelloMind, from Rose's perspective, becomes co-controlling in how the patient learns to reproduce aspects of themselves to thought and language via sessions, as well as how HelloMind helps to dissolve the relationship between cure and care, as the patient and the patient's actions are handled by themselves, due to, as the informant narrates, all the work lies with the individual who starts the session (Rose 2001; Appendix 3). When an individual takes an active role in their own health, it implies that they thus are governing their own freedom, by determining how they understand and care for their own health (Rose 2001). To this arises the question of whether we are strong and skilled enough to also be able to assess what it is we need, or does the patient still need care and physical consultations? According to informant J, care and physical consultations are needed:

“If I were to use only one app to improve my mental health, then I would lack the care of the psychologist, who could constantly tell me that everything should probably go well and that I was on the right track. An app can not provide that care, and that is probably what matters most when you receive treatment and work with mental health, I think.” (Appendix 4, p.2).

As informant J, a patient in the public psychiatric, explains in the quote above, you cannot stand alone with your mental health, as you need others to become mentally strong. According to informant J, care plays a major role in the course of treatment when you have problems with your mental health and that the app cannot replace the health professional. How the lack of care and the professional support will affect the patient and the course of treatment, will be examined in more detail in the next section of the analysis.

Perception and Achievement of Patient Empowerment

In this section of the analysis, we will examine how the user views the concept of empowerment and whether technological tools such as the HelloMind-app can help strengthen empowerment among patients and users and create competent health consumers. By examining this, we can become enlightened about how these digital tools affect the disease course of the patient, as well as who holds power over who, and what it means for the patient and their empowerment. And here, the most pressing question becomes: is increasing empowerment good for all, or will it create a dualism in the relationship between the “responsible citizen” and the “fragile patient”?

Being healthy can be assessed both as something subjective and as a medical condition, and it can thus be difficult to define empowerment, in connection with health, homogeneously. Patient empowerment in the broadest sense aims to strengthen or expand patients' freedom of action. Care must be provided, but if the patient can do it themselves, it creates both involvement and freedom for the patient, and the patient thus becomes independent of the health professional's presence. Therefore, we see the concept of 'patient empowerment' as letting people take control of their own health and treatment, and we will focus on the part of empowerment that aims to give patients greater freedom of action by increasing their control over their own health. While the possibilities of more control for patients are far more, and that it creates a higher degree of increased freedom of action for them, than simply supporting existing control.

"When we talk empowerment, then this is a way to take life with the problems you can see and be able to do something, instead of maybe just Google around the web for symptoms. It is without side effects, just a tap on an app... So, there are many ways to approach some of these things, when you may not think you are heard the way you want in the healthcare system." (Appendix 3, p. 2)

In the quote above, our informant from HelloMind emphasizes the fact that it is the patient who must learn to master their suffering to become independent of public support. That is, the patient is portrayed as one who needs to take control of life through independence and accountability. Thus, the patient achieves a sense of inclusion as the patient's own role gains value. At the same time, we see in the quote, that the patient is highlighted as a partner in their

course of treatment, which places the responsibility for their own health and well-being on themselves by using the app, and away from the healthcare professional and the public health system. What we can conclude is that the patient is not only responsible for their own life and actions that affect health, but also responsible for managing their own symptoms, assessment, and treatment, without having the same experience, knowledge, and action basis that a health professional has. The idea of making the patient more responsible and active in the course of treatment is in contrast to how health in the past has been governed solely by policy and health managers. This understanding of how health was governed by policy and health managers, fits well with the theoretical and societal knowledge that Rose presents. From Rose's perspective the individual is now guided by external technologies, and not necessarily by policy or health managers, which enables the control of the individual at a distance, by promoting their participation via HelloMind. Rose believes that technology can be understood as management tools used by the state - therefore technologies are power-creating (Rose 2001). The participation with technologies brings out challenges for the users and patients, as mentioned in the quote below:

“When there are things that happen inside my head that are difficult, then it is probably not in there that I can solve them. I need help from outside. I sat for an example one day and googled a bit of symptoms and it completely led me astray, where I well knew that it had taken over and that I just had to wait until I had time with the psychologist. I thought I could diagnose myself and get wiser on my thoughts, but I just got even more confused. ”

(Appendix 4, p. 1).

As informant J mentions in the quote above, having to manage their own symptoms and treatment is too much of a responsibility to impose on people suffering from mental illnesses. The informant narrates how care, support and physical interactional help is crucial for them to cope with their mental problems, as they can feel fragile and vulnerable as a patient. Informant P, the psychotherapist, resonates with the statement by informant J: *“I do this for those who are most fragile, because in the beginning they need someone to lean on, and I go in a little more actively and are advisory and supportive.”* (Appendix 1, p. 4). The knowledge that one can gain themselves, through digital tools, can thus risk creating more confusion than benefit. This creates a dualism in the relationship between the “responsible citizen” and the “fragile patient”, respectively. The "responsible citizen" represents an imposition of liability, while "fragile patient" represents a discharge of responsibility, which according to the

informants does not benefit the course of treatment. Consequently, the dualistic relationship can be thought of as multiple ways of treating people, such as psychological assistance or supportive apps and online knowledge. Even though there is a significant shift of responsibility between the two, they can be said to share the same fundamental ideal of responsibility. In this case, the individual is responsible for illness and health. In cases where the individual cannot be held accountable and may be suffering from mental illness, the individual becomes a patient with a diagnosis, and the public health sector must and is obliged to step in, to provide for and support the vulnerable patient. Therefore, it seems to be a fair assumption that a patient should only be given as much control as they are able to carry out, instead of handing over the management of complex technologies to a patient who knows nothing about the technology, and thus ends up in a failed transfer of control and responsibility.

“So somewhere, knowledge is really good. But if you do not have the skills to use that knowledge, then it may help to make you more stressed, more fearful [...]” (Appendix 1, p. 13), as informant P mentions in the previous quote, it is necessary to empower patients, in order to be able to make informed, critical decisions about their own health. By doing this, they will become both more competent health consumers, but also more engaged in their own treatment, and as a result, achieve patient empowerment. While also ensuring that the health professionals have the knowledge and resources necessary to make decisions focused on health, they must also ensure that the patients benefit from the information. Additionally, digital tools could enable patients to play a more active role in maintaining their health, because health information is now more accessible than ever, for the common citizen. Since the patients now have more general access to knowledge about diseases, they therefore also have an increased ability to become more aware of symptoms or abnormalities, making them prone to act earlier, take more hand of themselves in their treatment and reach out to their treater, if they feel like something is not right. In this way, they will gain more power over their health and disease, and take action, instead of letting the disease control their life.

“So it is great that you can have something, where if you can feel that: okay, I am in a stressed period, so now I am going to use this app, before it goes wrong. [...] it might be a bit easier, and a bit more manageable and like: okay now I am going to give this a shot with this app, or a meditation exercise or something different.” (Appendix 2, p. 8)

In the above quote by informant M, we are especially noticing that they can notice which type of period they are in, in their life, besides of the fact that they have knowledge about several tools they can think could come in handy, when they are in those periods. Since M knows about different tools to make use of, when they are in specific periods - or feeling like they are entering them - we argue that the fact that the citizens are able to both diagnose and know which tools to use, in combination with each other, makes the patient and common citizen more empowered of their health. It also gives them a possibility and ability to gain control of their disease before it goes wrong. Additionally, they thus have an increased ability to try to help themselves, before they reach out to regular health managers. These possibilities and the accessibility to knowledge provides the citizens with a larger part of control over their health and course of treatment, besides empowerment of themselves, since knowledge about tools and symptoms, can be gained freely, and with that, they can act faster if they notice abnormalities.

What Did We Discover?

Our analysis explored the impact HelloMind and technologies have on the individual's freedom, health management, and the surrounding society's influence on health norms in 2022. In addition, we explored the empowerment concept, which promotes patients' control over their health, as well as how technologies are forming and affecting users' behavior and understanding of technology on both an individual and societal level.

We explored that, with the perspective of Foucault and Rose, there are created and exists power relations, where somebody or -thing is above the users, and acts as regulating and controlling rather than guiding entities for the users' behavior and use of technological devices. Since we live in a *panoptic* society in a digital era, it is increasingly the technology providers who are the surveilles and their logging and data gathering of the citizens acts as a decreasing force on our free mind and perception of the human being, despite an introduction to technological tools as liberating. Furthermore, in a *biomedical* society, individuals aim after optimizing themselves physically and psychologically, which we argue is why apps like HelloMind and other health apps exist (Rose 2001). In order for HelloMind to function best possible and correctly, you have to be in a calm and 'safe' environment, meaning that the user will most likely do the sessions at home. Therefore, you are not forced to leave your house when beginning the treatment, and you will thus not have to create new safe spaces or push your boundaries, in a developing way. Due to the aforementioned, you will do the sessions at

home and alone, resulting in a lack of development in your nervous systems, since you will not interact with other human beings in the same way, and it will be easier to individualize and isolate yourself, since you are not obliged to engage with others. This will according to our analysis result in a lack of development, when looking in contrast to working with a health professional. Working with a health professional creates a commitment and responsibility that you have towards yourself, in order to get better, and a dualism in the relationship between the “responsible citizen” and the “fragile patient”. Lastly, we can conclude from the analysis that mentally free is more subjective to determine in which parameters the freedom counts, for some it might be from addiction to their telephone, others work, stress, anxiety, etc. The correlation between the physical freedom that technology brings you, creates a paradox in the ubiquitous and scrutinizing patterns that technology has, in a digital era and *panoptic* society.

Following these points, it becomes interesting to discuss several aspects of participation in social practices and freedom of individuals in the Western world in 2022. We will therefore explore in the following chapter the use of digital health apps more generally, to identify some of the dilemmas and challenges that may arise with the use and implementation of apps such as HelloMind, as well as the consequences for the individual.

Discussion

In this section, we will discuss the findings of the analysis and HelloMind in relation to the healthcare system more generally, besides how the development of digital tools influence the patients' role in the course of treatment. Here we will discuss some of the challenges, both for therapists and patients, that may arise when using HelloMind in a societal context. We will also touch on the subjects of the addictive facets that technological and digital tools have and how it may lead to the treatment becoming a misuse in itself. Furthermore, we will also discuss how technological tools and the power relations that are created when they are being used and enter a scene, and how these tools might act as controlling, rather than as a guiding. With the development of digital tools in healthcare, both the role and health authority of healthcare professionals have shifted drastically, as well as the opportunities and challenges for patients. What does it mean for the interaction between therapists and their patients, when the patients have greater access to digital platforms where they can learn about diagnosis and treatment? And when they themselves can measure and gain knowledge about health via apps and wearables? Therefore, it is necessary to examine the way in which digitization changes the premises of treatment.

Vulnerable In a Digital World

HelloMind was, as stated previously, created to effectivize course of treatment and give the patients an opportunity to take their health into their own hands and receive an easy way to treat their mental health: *"When we talk empowerment, then this is a way to take life with the problems you can see and be able to do something, instead of maybe just Google around the web for symptoms. It is without side effects, just a tap on an app... So, there are many ways to approach some of these things, when you may not think you are heard the way you want in the healthcare system."* (Appendix 3, p. 2). By using HelloMind, the patient is forced into a learning process where they must decide and interpret their own symptoms, and in this way achieve a better and more reflective understanding of their own well-being, which can be value-creating for the patient. This also creates a hermeneutic human-technology-world relationship because the app alters the perception of the world for the user. By digitizing the consultation and doing it online, it means for the user that the technology engages with the user, and the user now is taking a more active and involved role in the course of treatment (Ihde 1990). In addition, questions arise about the significance of the increased involvement

and the imposition of responsibility for the individual? These questions will be looked into in the following sections.

When psychologists, therapists and other health professionals are left out in the course of treatment, as they do with the use of HelloMind, then the care and physical consultation are just as left out. This will lead to wondering if the application is just another system that does not seem to be created for a clinical reality, and an application where the main focus is on the screen, and not on the patient - where the focus should be? And who will be in charge of the patient? That responsibility must thus be borne by the fragile patients themselves. For some people, mental health issues are a sensitive matter, an insecurity, and the idea of being able to seek quick and efficient solutions where they do not have to be consulted physically, can be a relief. Nonetheless, in cases such as these, where you are vulnerable, do you not find that it is crucial to have physical contact and connection with another person? Being seen, understood, and taken care of and receiving that treatment face to face? If this conception holds true, it is important to ask whether online medical consultations are sufficient in terms of providing the patient with care - and if so, how much care is enough for the patient, to be able to handle their health on their own?

By receiving treatments and options for treating their mental health, the patients are being taken care of to an extent. An app will provide an easy and accessible way to keep track of their illness, and hopefully that will contribute to a greater feeling of autonomy and sense of their health, making them able to receive and seek help before their health condition gets worse. An online consultation or an application that you most likely possess at all times, may be a good short term solution for many people in situations such as the abovementioned, since their immediate needs will be met. In this case, the patients would receive a rapid and accurate response and solution, which would help to calm them and bring clarity to their situation. But if you, as the patient, are suffering from a mental condition, you will most likely in the long haul need care and compassion. Physical care and compassion are not something that an application can provide.

A second point that we would like to address is that medical and political priorities for health also mean that individuals thus have an obligation to maintain and promote their own health (Rose 2001). As Rose explains, the ideal in our society is social responsibility, self-management, and self-optimization, meaning that diagnosis and treatment are being

shaped by this concept (Rose 2001). Therefore, the diagnostic practice can potentially lead to overdiagnosis because those who do not fit into cultural and social norms are considered pathological. Thus, the idea of health promotion, of controlling the patient and their behavior is becoming more prevalent in society, whereby the biological citizen has the ability to monitor and manage their thoughts, symptoms, and behavior, while using the latest technology and focusing on optimization of their health.

Individuals are constantly under pressure due to the norms and ideals set by the surrounding society, which one has to achieve, to not be excluded. Since the human being is a social species that functions best and needs to interact with others, one of the worst sanctions is to be excluded from the society that we are engaging in. As a result of this, we want to be recognized by the ones around us, why our responsibility and motivation to achieve the norms and ideals set by the society, is increasing and thus the pressure on our shoulders. In the haul of living up to the norms, economics also plays a role, due to their influence on the human's perspective on practices and measures. The aforementioned is why we argue that health-promoting measures should be based on social and economic factors. In the pursuit of efficiency and productivity, it can from one perspective be argued that human considerations are being forgotten. It also expresses the human's perspective in addition to an understanding of mental health as an individual. An individualization process in which people take on the responsibility for their own health and view health either as an indicator of their vulnerability or as an indication of their inability to succeed. It is through diagnosis, therefore, that individualization is accomplished, which can be considered as a means of establishing order in society. In contrast, a diagnosis can lead to stigmatization and exclusion of those who are unable or unwilling to adapt. Although the focus on a person's responsibility changes during the diagnostic process, the underlying responsibility remains the same.

Thirdly, the rapid development in technology influences the way we are perceiving treatment and diagnosing in today's society, which we would like to discuss and elaborate further. The Corona-crisis has made a great impact on digitalization in the healthcare system (Peek et al 2020). Video consultations and other digital solutions have become more widespread, which enables more flexible patient processes and efficiency, and also made it possible to keep a safe distance during the pandemic, which was important. Health IT and digital solutions, when used wisely and correctly, can make it easier for both patient and doctor to collaborate with each other. It can increase the quality of treatment and patient safety since the patient

will not need to wait multiple hours in the ER or days to get a physical doctor's consultation. At the same time, it can also provide physicians and other healthcare professionals with easy and fast access to patient data across sectors. But has all digital been rosy during the epidemic? You would think that many, especially elders or those who did not grow up with technology the same way as people in their twenties and younger, experienced technological difficulties in terms of, i.e., booking appointments for vaccination, ordering a COVID test or getting a COVID passport, etc. since it all was digitized. If we think exclusively in digitalization, we risk making several citizens worse off. Many citizens, especially the elderly, do not necessarily have the IT-skills that are required to use the digital solutions that are offered. HelloMind is a case of how digitalization is increasing and moving into spheres that previously had been reserved for physical interaction, and thus creates scenarios where not everyone has equal access to healthcare.

Among the excitement of artificial intelligence and health technology, one should have in mind that from one side of the matter, technological advances can be detrimental to patients who are resource poor. As already mentioned, implementing health technologies can lead to challenges with potentially large inequalities in health, since learning which devices and wearables one needs, requires both physical and mentally resources. When using HelloMind as a treatment for mental illness, the app is acting as a translator of knowledge. Using the app, users can monitor and follow their steps in the treatment and discover more issues with their mental health. The app helps to mediate knowledge to the user, so it becomes easier for the user to understand the illness and the course of the disease. At the same time, the app also transforms the human-world relationship for the user, as the technology becomes the mediator of knowledge (Ihde 1990). Having this in mind when perceiving technologies and digital tools, the vulnerability of the human is emphasized, due to the requirements of various skills that are needed, in order to follow up with society's norms, ideals and skills to select useful knowledge from the digital mediators.

In continuation of the discussion above, we can ask the question: what will the future of health be like ten years from now? Considering the rapid development of technology, one might imagine that in the future, health will be more automated, data-driven, and patient-centered. The offer is based, among other things, on technology's increased potential for patients through apps and wearables, such as the HelloMind app. As a consequence, it is possible to argue that the patient becomes a resource, and the data becomes commercialized.

Should we think of this as a positive or a negative? Will patients' needs be replaced by a focus on simply treating them and streamlining the system at the expense of providing care? In addition, how do we ensure that patients do not merely become data producers and a currency during this process? And who should keep an eye on the huge amount of data, and be in charge and have access to it?

Leading up to who is responsible if a patient is monitored and registered 24 hours a day? Potentially, that data can be used for many things. Is it the patient's own responsibility if something is overlooked? Digitization should be used where it makes sense. Where it promotes patient safety, the quality of treatment increases, and not where digitization is done for the sake of profit or digitization itself. When having Nicolas Rose's assumptions in mind, regarding time and health being an economic factor, one can then wonder which factors and consequences the rapid digitalization of the healthcare system has, to the society and human beings (Rose 2001)? Is it more important for the patients to receive a quick answer and treatment solution that might not be personalized for the patient's specific problem, but is a treatment that anybody can get, like the HelloMind sessions - or is the physical and human connection, where you go in depth with your condition, equally as important? In the following section, we will attempt to find out more about that, and what other challenges are attached to these concerns.

Reformulation of the Brain

Zooming in on the particular power HelloMind can have, we can look back on what our expert informant, the psychotherapist, narrated about how the brain acts and reacts in relation to finishing and completing steps and tasks, “[...] *our brain thinks that it is really nice, if it finds out that, now I have completed these 10 (red. sessions).*” (Appendix 1, p. 10). Due to our brain getting satisfied by completing tasks, and the application showing you and knowing how far you are with the sessions, the app thus creates a power relation in regards to the user, since they have brought in a compelling force in terms of the steps of completion, and that there thus is an incitement, both in relation to completing 10 out of 10 tasks, but also in terms of thinking that it might now work, if the 10 steps are completed. When zooming in on the technology, in a *biomedical* and *panoptic* society, we can add on one of the principal notions from Postphenomenology, by Peter-Paul Verbeek, which we also introduced in the section ‘Mediating the World’, namely *mediation approach*. *Mediation approach* is based on the principles of perceiving human and technology as two different entities, who are shaping

each other. In relation to HelloMind, we argue that the application is shaping the human in how they act and think, and probably persuades them into completing the steps, due to how the application is made, where it taps into the brain's satisfaction with completing steps. Perceiving it in this way, the app will become a controlling element towards your behavior and actions and make you act according to the guidance and rules set by the app.

In the perception of Rose, in the *biomedical* society, we want to optimize our health. The governance of our health is increasingly in the hands of self-help apps like HelloMind and calorie trackers, since they are the ones who are becoming the ones in power, when they provide the users with information and tools on how to optimize their health. When they do so, the self-help organizations thus become the ones who are guiding the users on how to act and which choices to make in relation to the concerning matter, which gives them the same position as the shepherds, leading the sheep, *“It could i.e., be young teenage girls who are on the verge of an eating disorder, there the addiction of a fitness app could be a helper to cultivate the obsession of losing weight. And then the treatment would suddenly become a misuse in itself, and then it has no use.”* (Appendix 4, p. 2). As informant J is pointing out in the quote above, *“the treatment would suddenly become a misuse in itself”* (Appendix 4, p. 2), which creates a duality in the self-help apps and their impact on the users and patients, especially regarding people suffering from mental illnesses, or are prone to it. Self-help apps in different variations have been made to aid self-help and tools to the user, which they can use to reach their goal. Though it also has weaknesses in its functions, which makes it possible to be misused by some users and patients, and therefore we argue that digital tools in relation to self help can end up having the opposite effect on the users and patients, than the intended. Further along with the perspective of the *biomedical* and *panoptic* society, we see that it is the technological and digital artifacts that hold the power, and thus will the users’ perception of the technology and their world, likewise change. With these two understandings, it is the technological and digital tools, such as HelloMind, that become the ones in power, why the digital tools are the ones who hold the control over the users. Therefore, it is implied that technologies are becoming more influential in how users perceive their role as well as the technology’s role as mediators.

In Postphenomenology, there are four different types of relations, who all represent a different type of relation that technology and humans have with each other and how technology is mediating the world. In this thesis we argue that an app, like HelloMind, can

be categorized as a *hermeneutic relation*. A *hermeneutic relation* is where the user is interpreting and perceiving the world through the technology, besides the understanding of it. The *hermeneutic technology relation* is denoted as an interpretation of the world, where the technology is mediating the representation of how the world is interpreted. We therefore argue that the user or patient will interpret themselves and their perception of the world through the app, whereas the application will gain power over the user, since the user is perceiving their reality as how the app presents it. In this way, the app is creating an opposite effect of freedom and how we perceive freedom in 2022, hence it is applying a dependency from the user to the application and a belief in them needing the app, to perform or act accordingly to the norms and rules set in our *panoptic* and *biomedical* society. In the following section we will be detailing the potential loss of control and lack of freedom that the use of digital tools can create.

Loss of Control in a Digitalized World

As we have emphasized and expressed throughout this thesis, technological tools have made their entry into the Western society over the last couple of decades, where they, especially since the invention of the computer, have been playing an increasing role in our everyday lives. Now, technological tools are not only reserved for people in specific labors or social layers, but they are accessible for all who can purchase or have access to somebody or a place who has it. Technological tools have developed from being i.e., machines in factories that lightened the hard work for humans, into being small technological tools that we have in our pockets, that contain almost all of our personal information. The tools now detect and have information on what and how we use our device, to what we search on, which apps we have, our social security number, facial recognition, where we are and have been located, for not to mention how much we sleep, move and when we experience abnormalities or have an behavior that is out of the normal for us, and the list continues. Some would be prone to say that our devices and digital tools knows more about us, than we do about ourselves, since their logging of our whereabouts works together with their algorithms, to try to predict and find out about what we are searching after, engaging with and our interests at the moment,

*“[...] the Instagram algorithm sorts through the content of the accounts you follow and predicts how likely you are to interact with a post [...] For the **Explore** tab, the algorithm looks at previous posts that you’ve liked or interacted with, and pulls in a*

collection of photos and videos from related accounts that you don't follow (yet!). These photos and videos are then ranked by what the algorithm thinks you'll be most interested in, based on how likely you are to like, save or share a post.” (McLachlan 2022).

The above quote illustrates how, for example, the Instagram algorithm first examines your past interactions on Instagram and then attempts to predict, based on what you have interacted with in the past, what you are more likely to interact with in the future. If we were to say that you started to engage with multiple accounts that shared posts about eating healthy, losing weight, and eating and making food that was low on calories, the things that would get shown dominating your feed, would then be such posts – both from accounts that you follow, and accounts you do not follow. By the algorithms working in such a manner, you will constantly get fed with “*previous posts that you've liked or interacted with*” (McLachlan 2022). By the algorithms working in this way, they will make sure that you stay in the same lane, which is why we argue that it can be easy to get lost within the rabbit hole, of this specific subject.

If we are to relate it to a subject that several of our informants touched, it could be the phenomenon of tracking your calorie intake. “[...] *if we are thinking calorie-app, then there are a lot of cons about it, because you could get totally obsessed [...]*” (Appendix 2, p. 8), as informant M is vocalizing in the previous quote, then applications like those who are counting calories, can become an obsession, where you start to live your life after what the app recommends, instead of using it as a guideline. We ought to assume that i.e., a calorie app has been made to help people with living a healthier life and know what they are eating in a day, how they can make another choice or make a different dish with the same calorie intake, same taste, but different ingredients. The app has thus been made as a guiding tool for the user, on how to improve their health, but it was not necessarily made with that in mind to become a controlling tool. “[...] *then they become crazily obsessed with it, and then it also starts to be like that when they are going out to shop in a grocery store, then it becomes out of the app.*” (Appendix 2, p. 8), as the previous quote by informant M emphasizes the fact that apps that, presumably, have been made as guiding tools in order to optimize one's health and supports the norms that have been set in a *biomedical* society, suddenly can become obsessive. As informant P, the psychotherapist is also narrating in the following quote, our brain is developed so that it gets satisfied by finding out that we have completed something: “*Because our brain thinks that it is really nice, if it finds out that, now I have completed these*

10. So, there is something in us that would say “Yes, now we are on a roll” [...]” (Appendix 1, p. 10). In relation to the previous quote by informant P, who points out that we by instinct are getting satisfied by seeing completion, achievements, and finding out that we are capable of completing or following guidelines, and thus believes that we are ‘on a roll’, there is also the famous saying: Why fix it if it is not broken? The saying underlines what both our informants who are suffering from mental illnesses and the psychotherapist, in the captivating force that guiding technological and digital tools holds. Because why should we not continue with what we are doing, if it goes well, is successful, and we are completing our goals?

Apps like HelloMind, calorie and step counting, and several other health apps, have presumably been made to help us diagnose and become aware of our health, and to strive after becoming a healthier human being and society overall. Many fast-food chains, like McDonalds, Subway, etc., are significantly cheaper than vegetables and making healthy meals at home, which causes many with a tight economical budget, choosing fast food options instead (Jones et al 2012). In this way the fast food chains are creating a hierarchy where they are the ones holding the power over the citizens, who might not have the economy, knowledge or capacity to take on the responsibility of their own health. The aforementioned apps are made with the purpose of people choosing their health and wants the regular citizen to be aware of their health, and take control over it, by being able to calculate and make their own decisions, so it will not be organizations as McDonalds that holds the power over the citizens health. On one hand the digital tools thus take on a position of being an empowering tool for the user, since it does not require much capacity in order to achieve the society’s norms and goals, in a *biomedical* society, where we want to enhance our health at all times.

On the other hand, the downfall about these apps is thus, that as informant M and J points out, they can become tools where the users are starting to rely too much on the tool. Once the users are starting to rely too much on the technological and digital tools, the tools are starting to act as controlling forces instead of a help and guide, and thus the power relations, as both Rose and Foucault narrate, are shifting. Rose argues that the citizen in the modern Western world lives in a *biomedical* society, where optimization and enhancement of health is at focus, and the ones creating the guidelines and governs the citizens is not the law makers, but various stakeholders, from organizations to researchers, to employers and professional associations, and by that it is the shepherds - the stakeholders - leading the sheep - the users

and citizens. Foucault states that the power in a *panoptic* society comes from something or -body, being able to surveil someone, why the subject for the surveillance is thus controlled to act according to the rules or norms being set by the society. As the i.e., smartphone is increasing their knowledge about the user every second, we argue that with a Foucauldian and *panoptic* perception on our case of HelloMind, the telephone thus becomes what is the prison guard in the Panopticon-prison, since it is a ubiquitous and omnipresent observer, where you will never actually know when it is observing, and how much it precisely gathers. The smartphone acts as a controlling power due to its presence and increasing impact on how we behave in our everyday lives. By using a smartphone, and HelloMind, we can now have our therapy sessions in our own homes, on the go, or any location we choose, rather than leaving the house and interacting with others. In this way, smartphones and self-help organizations are thus changing the way mental illnesses are treated.

Sub Conclusion and Recommendations

As a result of our discussion, we aim to contribute to improve the relationship between experts and users, in particular regarding the social responsibilities associated with the implementation of digital health applications. We will also offer some recommendations for an appropriate response to digitalization in healthcare. With loss of control and vulnerability in a digitalized world in mind, patients cannot only be seen as data sources and become numbers that the organization can use for research and quality development but must continue to be viewed as individuals who need both physical care and treatment. This is recommended as the vulnerable health consumer, cannot take on the responsibility of care on their own. Therefore, we recommend that the developers and the healthcare system ensure that patients are provided with the best possible conditions, in order to be able to self-diagnose, and meet the needs of both patients and healthcare professionals.

Using an app is not like wearing glasses, but rather something we are implementing in our brains, since it is through there it is mediated, received and understood. Therefore, we will furthermore argue that the Western society must tune into and be willing to adapt to a rapidly moving digitalized society, where more and more technologies will be the new mediators of knowledge. In the long run, digitalization and technological development have arguably brought about an inevitable further digitalization of healthcare due to overall efficiency. From that, we propose that it would be necessary to connect digitalization with professionals in

order to find balance between human care, when and where it is needed and when it is not. The use of digital tools should therefore be viewed as a supportive measure as opposed to the sole treatment of a patient with mental health issues. In order to provide the right form of treatment for each individual, this approach would also need insights into other parts of the patient's health history. Another project could be inspired by exploring the above.

Conclusion

Over an analysis of various interviews of both experts and patients, and a perception and understanding of the Western World in 2022 as a *panoptic* and *biomedical* society, we have shown that digital tools, which HelloMind is a case thereof, cannot stand alone as a course of treatment, for people suffering from mental illnesses. We have uncovered that technology and the tools and aid it provides to our everyday lives, are not able to replace the physical consultations, and the help and support physical treatments provide, due to several reasons. Firstly, our bodies and nervous systems require physical interaction and togetherness, in order to develop. Resulting in that if potential patients were to choose an app as a course of treatment instead of physical treatments, when the nervous systems are in need for physicality, it will not have an effect that is nearly that good.

Second, it is important to have an incentive, i.e., a commitment to and with another person, to act on one's problem, besides of leaning towards someone – that will not be possible with technological tools, since it solely will be between the tool and user. The technology will further not be customized to the individual patient, increasing the difficulty in treating the patient for their specific illness. In relation to this, the technology is not able to diagnose a patient or help them with expert knowledge on the specific issue, moving the responsibility from the experts to the patient. With the technological entry and rising interest in health, due to our *biomedical* society, likewise has the interest in health tech increased, why more and more developers have entered the field. With this entry, the possibility for users and patients to act on their own and 'treat' themselves has increased. The possibilities for the users and patients have made a shift in the imposition of liability in relation to health, since there now are other forms of treatment and other providers, which has not gone through any specific educations, etc. as a doctor, psychotherapist, Body SDS, or psychologist i.e., has. Independent technological tools, such as HelloMind, thus creates a new question and pressing matter of who has and where most of the responsibility of a citizen's health lies, and who should have it? We are living in a world where technology develops at a rapid pace, constantly evolving and it is hard to predict what the next new technology would be and down which road we will be taken. For the lawmakers it is difficult to keep up with the

developer's pace, calling the tech industry 'The Wild Wild West', due to its continuously rapid and unpredictable evolution, with a constant growth of new functions (Kraus 2018). These developments are making it almost impossible for the lawmakers to make laws, hence they cannot make laws against something they do not know exists. With this unpredictability and "Wild Wild West"-like conditions that the technology companies are developing their products in, it is challenging for the various governments to be able to protect their citizens against malicious side effects of what the tech companies are offering (Kraus 2018).

The tech companies are saving information about their users and building their products in such a way, where they are creating addiction whilst gaining their control over their users. In a society where the citizens constantly are at risk of being captured, to which extent is freedom counting – and in which way? We are at the same time living in a society where we are challenged significantly mentally, and more are suffering from mental illnesses. When we are engaging in a both online and offline world, where pressure constantly is applied mentally, and the lawmakers' chances of being proactive in their protection, we are thus all at risk for being sufferers from mental illnesses and our lives getting affected by it to some extent.

Due to the above, we argue that since we live in a digital era, in a *panoptic* society, the importance of offline interactions and attentiveness of others is increasingly important. In continuation, the awareness of the lack of laws and protection of the users, is important to be aware of, when applying and making use of apps like HelloMind, and thus the allocation of one's responsibility of health, hence it is made easier to hide and the treatment can become a misuse in itself.

Bibliography

- Aarhus University. n.d. “*Emic vs etic*”. Accessed 2022-03-07.
<https://metodeguiden.au.dk/emic-vs-etic>
- Birkholm, Klavs & Frølich, Niels. 2018. “*De skjulte algoritmer (The Hidden Algorithms)*”. Teknoantropologiske perspektiver, 1. Copenhagen: Djøf, pp. 23-57
- Brinkmann, Svend. 2015 “*Mikro- og makroetik. (Micro- and macro ethics)*” in “*KVALITATIVE METODER - En grund-bog*” edited by Svend Brinkmann and Lene Tanggaard, 473-75, 2. udg. Copenhagen: Hans Reitzels Forlag.
- Brown University. n.d. “*Internalized Authority and the Prison of the Mind: Bentham and Foucault's Panopticon*”. Accessed 2022-04-11
https://www.brown.edu/Departments/Joukowsky_Institute/courses/13things/7121.html
- Foucault, Michel. 1978. “*Discipline & Punish – The Birth of the Prison*”, 1. (American edition) America: Pantheon Books
- Flyvbjerg, Bent. 2010. “*Fem misforståelser om casestudiet (Five Misunderstandings about Case-Study Research)*”. In Svend Brinkmann and Lene Tanggaard, eds. *Kvalitative Metoder*, Copenhagen: Hans Reitzels Forlag, pp. 463-487.
- Haydon, Pandora. 2021. “*Record investment in global healthtech sees 280% increase on 2016 levels*”. Mobi Health News. Published 2021-11-23.
<https://www.mobihealthnews.com/news/emea/record-investment-global-healthtech-sees-280-increase-2016-levels>
- Heidegger, Martin. 2010. “*The Question Concerning Technology*”. In Craig Hanks (Red.) *Technology and Values. Essential Readings*. Chichester: Wiley-Blackwell. pp. 99 -113
- Ihde, Don. 1990. “*Technology and the Lifeworld: From Garden to Earth. Bloomington and Indianapolis*” in Indiana University Press.
- Jones, Nicholas R. V., Annalijn I. Conklin, Pablo Monsivais & Marc Suhrcke. 2014. “*The Growing Price Gap between More and Less Healthy Foods: Analysis of a Novel Longitudinal UK Dataset*”.
<https://doi.org/10.1371/journal.pone.0109343>
- Kraus, Rachel. 2018. “*What the real history of the 'Wild West' can teach us about the tech industry*”. Mashable. Published 2018-09-10.
<https://mashable.com/article/wild-west-tech-industry-regulation>

Marcus, George. 1995. “*Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography*”. *Annual Review of Anthropology*, 24, 95-117.

McLachlan, Stacey. 2022. “*2022 Instagram Algorithm Explained: How to Get Your Content Seen*”. Hootsuite. Published 2022-02-28.

<https://blog.hootsuite.com/instagram-algorithm/>

Mortari, Luigina. 2015. “*Reflectivity in Research Practice: An Overview of Different Perspectives*”. In *International Journal of Qualitative Methods*, 14(5). pp. 1-9

Nicolini, Davide. 2009. “*Zooming In and Out: Studying Practices by Switching Theoretical Lenses and Trailing Connections*” in *Organization Studies*. 30(12), 1391–1418

Rose, Nikolas. 2007. “*The Politics of Life Itself : Biomedicine, Power, and Subjectivity in the Twenty-First Century*”. Princeton University Press.

Rose, Nikolas. 2001. “*The Politics of Life Itself.*”. In *Theory, Culture & Society*. 18(6), 1–30.

Rosenberger, Robert. & Verbeek, Peter-Paul. 2015. “*Postphenomenological investigations: Essays on human-technology relations*”. London: Lexington Books

Verbeek, Peter-Paul. 2011. “*Moralizing Technology: Understanding and Designing the Morality of Things*”. Chicago: The University of Chicago Press

Wolpert, Stuart. 2013. “*UCLA neuroscientist's book explains why social connection is as important as food and shelter*”. UCLA. Published 2022-10-03.

<https://newsroom.ucla.edu/releases/we-are-hard-wired-to-be-social-248746>

Peek, Niels, Mark Sujana, & Philip Scott. 2020. Digital health and care in pandemic times: impact of COVID-19. *BMJ Health & Care Informatics*, 27(1).

<https://doi.org/10.1136/bmjhci-2020-100166>

Psykiatrifonden. 2021. “*Tal og fakta om psykisk sygdom i Danmark*”. Psykiatrifonden. Published 2021-06.

https://psykiatrifonden.dk/sites/psykiatrifonden.dk/files/media/document/Rapport_Talofakta_PsykisksygdomDK_300621.pdf